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THE HARVEST OF AND TRADE IN LATIN AMERICAN
SPOTTED CATS (FELIDAE) AND OTTERS (LUTRINAE)

by

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A report on the harvest of and trade in Latin American
spotted cats (Felidae) and otters (Lutrinae).

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1. INTRODUCTION

The status of neotropical cats (Felidae) and otters (Lutrinae) was investigated in 1982/1983 by Wayne Melquist (1984). It was felt that further information regarding the harvest of and trade in these species, past and present, was required to complete the investigation. The current report aims to complete a broader picture of the status of the neotropical cats and otters and to provide a more comprehensive background upon which to base recommendations for their future exploitation, by providing recent and historical information on their harvest and trade. Melquist (1984) considered seven spotted cat species (Felis geoffroyi, F. guigna, F. jacobita, F. pardalis, F. tigrina, F. wiedii and Panthera onca) and all four Latin American otter species (Lutra felina, L. longicaudis, L. provocax and Pteronura brasiliensis); we have included Felis colocolo in addition to these species in light of the large numbers of skins of this cat traded in some recent years.

The Latin American cat and otter species have been subject to different levels of exploitation, but generally their status has been perceived as becoming increasingly precarious owing to conflicts with human populations. Of the twelve species included in this study, seven were listed as 'Vulnerable' in the IUCN Mammal Red Data Book, one as 'Intermediate' and one as 'Rare' (Thornback and Jenkins, 1982) (see Table 1).

Table 1

Species covered by the present study (with English names)

	<u>RDB Category</u>	<u>CITES Appendix</u>
<u>Lutrinae</u>		
<u>Lutra felina</u> (Marine Otter)	Vulnerable	I
<u>Lutra longicaudis</u> (South American River Otter)	Vulnerable*	I
<u>Lutra provocax</u> (Southern River Otter)	Intermediate	I
<u>Pteronura brasiliensis</u> (Giant Otter)	Vulnerable	I
<u>Felidae</u>		
<u>Felis colocolo</u> (Pampas Cat)	(not listed)	II
<u>Felis geoffroyi</u> (Geoffroy's Cat)	(not listed)	II
<u>Felis guigna</u> (Kodkod, Chilean Cat)	(not listed)	II
<u>Felis jacobita</u> (Andean Cat)	Rare	I
<u>Felis pardalis</u> (Ocelot)	Vulnerable	I/II
<u>Felis tigrina</u> (Little Spotted Cat)	Vulnerable	I/II
<u>Felis wiedii</u> (Margay)	Vulnerable	I/II
<u>Panthera onca</u> (Jaguar)	Vulnerable	I

(* - subspecies longicaudis only)

Reports on the status of Latin American cats have repeatedly pointed out the difficulties in providing accurate estimates of the size of their populations and, in most cases, even in producing firm evidence of population decline. Status studies such as that carried out by Carl Koford in the early 1970s (Koford, 1973a) based mainly on Ocelot (Felis pardalis) and Jaguar (Panthera onca), two of the better known species, have produced very few quantitative data on population trends. Koford (1973a) reported that the cats were usually secretive, nocturnal or crepuscular and largely confined to areas uninhabited by man. Populations of species with such habits and habitat preferences are

very difficult to assess. Similarly the neotropical otters, although largely confined to waterways which are potentially more accessible than dense forest habitat, have been subject to very few studies which have provided good population data.

Like many other species, the neotropical cats and otters are threatened in many areas by habitat loss caused by human activities and alteration of large areas of suitable habitat within their distribution. In addition, hunting for the fur trade has been an equal or, in some cases, the major threat to their populations (Thornback and Jenkins, 1982). Paradiso (1972) reported that most of the neotropical spotted cats were being exposed to widespread and seemingly uncontrollable mortality through the skin trade and that serious doubts existed that they could withstand continued exploitation at the rate experienced in the 1960s. Thornback and Jenkins (1982) described hunting for skins as a major threat to all of the neotropical cat and otter species they reviewed except Felis jacobita for which very little information was available. Schulz, in the welcoming address to a meeting of otter specialists held in 1977 (Duplaix, 1978a), described the depletion of otters throughout the Latin American region by human activities. Furthermore, evidence gained during the peak of the skin trade in the late 1960s and early 1970s began to provide quantitative evidence that hunting pressure on several species was greater than they could continue to sustain. For example, (Donadio, 1978) drew attention to the declining number of Pteronura observations in Colombia, previously a major source of skins for the fur trade, and Grimwood (1979) notes the increasing distances that hunters in Peru were having to travel in order to obtain reasonable numbers of cat and otter skins in the late 1960s.

The levels of trade experienced in the late 1960s certainly seemed sufficiently high to have had significant effects on wild populations. Myers (1973) reported the import of 31 105 Jaguar skins into the USA in the years 1968 to 1970 inclusive. During the same period, 349 680 Ocelot skins (probably including skins of other small spotted cats) were imported into the USA (Myers, 1973), reportedly the importer of around a quarter of the small spotted cat skins exported from Latin America at the time (Paradiso, 1972). Brazilian Government statistics revealed the export of over 50 000 Pteronura skins between 1960 and 1969 (Anon., 1963-1970). The Federal Republic of Germany has for many years been the world's largest consumer of skins of wild cats; imports of cat skins from South America reached a peak of over 350 000 skins in 1978 (see Appendix B of present report). Such trade has been shown to have involved very large amounts of money. Myers (1973) reported that Brazil's revenue from Ocelot exports in 1966 amounted to US\$1.25 million, that USA Ocelot skin imports in 1969 were valued at US\$6.5 million and that a good quality Jaguar coat could be sold in New York in the late 1960s for US\$20 000. In 1980, coats made of Ocelot skins reportedly sold for up to US\$40 000 in the Federal Republic of Germany (Anon., 1980a). The declared port-of-export value of cat skins exported from Buenos Aires during the period 1976 to 1979 was US\$10.5 million (Mares and Ojeda, 1984).

The extent of this trade and its possible effect on wild populations was recognised in a number of countries in the 1960s and 1970s. Legislation prohibiting commercial internal trade and export of wildlife specimens was introduced in Brazil in 1967 (Fuller and Swift, 1985). Other important steps to control commercial trade were taken in Colombia and Peru in 1973 (Koford, 1974). Furthermore all of the cats and otters were listed in Appendices I and II of CITES (see introduction of Appendix A to present report for dates of inclusion). By 1987 all of the species included in the present study were legally protected from commercial export in all of the countries in which they occur, with a few minor exceptions. The only one of these exceptions which

could potentially allow significant trade to continue is the fact that the legislation protecting the cats and otters in Suriname applies to the northern, settled region of the country only. However, the authorities in Suriname reportedly do not issue export permits for specimens obtained from the interior of the country (Fuller and Swift, 1985).

Despite the legal protection afforded to the spotted cats and otters throughout most of Latin America during the 1970s and 1980s, substantial numbers of skins remained in trade. These numbers have been maintained by changes in the species utilised (Caldwell, 1984) and by illegal trade, which has continued because of poor national and international implementation of legislation, problems with border controls in Latin America and the great financial incentives encouraging smuggling. Generally, however, international trade has been reduced markedly and it seems that this has not only been due to protective legislation but that it has also been caused by shifts in fashion trends and changes in attitudes to wearing fur (Niekiisch, in litt., 1987).

Various studies have looked at the possible future of the exploitation of the neotropical cats and otters. The basic legislative framework for controlled harvest and trade exists at a national level in many countries and at an international level through CITES. The problem remaining is the need for quantitative information on populations, their conservation status and the effects of exploitation. The current report aims to provide information to enable views of the status of these species to be seen in context with one of the major threats to their survival.

Methods

The investigation was carried out through literature search, correspondence and analysis of trade data. A wide range of relevant literature, both published and unpublished, was studied. Letters were sent to the CITES Management Authorities of all the Latin American CITES Parties, requesting harvest and trade information. This correspondence was conducted in Spanish and was sent via the CITES Secretariat in Switzerland. A number of traders and trade organisations were also contacted and asked for relevant information. The bulk of the trade data used was obtained from the computerised records of all trade reported by CITES Parties, held at the Wildlife Trade Monitoring Unit of IUCN's Conservation Monitoring Centre, Cambridge, and from published government trade records in the form of annual Customs reports and other such sources obtained from the U.K. Department of Trade and Industry, Statistics and Market Intelligence Library (SMIL), London. The methods used in the analysis of these data are detailed in the International Trade section and in the Appendices to this report.

The taxonomy of the Latin American cats and otters is extremely confusing. Certainly, no one nomenclature has been universally agreed upon. The present report follows the CITES Appendices for nomenclature of genera and species. An attempt has been made to quote currently agreed sub-species where possible. However, it must be acknowledged that many of these sub-species are poorly defined and would not survive a thorough review.

2. COUNTRY SECTION

Introduction

The following section of the report provides a compilation of information on the Latin American spotted cats and otters for all countries in which they occur. The United States of America is included for sake of completeness, as the ranges of a number of the Latin American species covered by this report extend, or are known to have extended in the past, into North America. For each country the following information has been compiled: a list of the native species (probable subspecies in parentheses); a brief indication of their distribution, population size and status; a summary of relevant legislation; an account of known information regarding the exploitation of cats and otters; and a tabulation of exports from the country reported in CITES annual reports and published Customs statistics (extracted from Appendices A and B). The information on distribution, population size and status does not represent the result of a new CMC status review as this was not one of the aims of the present report. However, the 'Species' sections do provide a brief summary of the known situation for each country, including some new information obtained as a result of CMC's work on the CITES Significant Trade Study, in order that the information presented on harvest and trade can be seen in context.

The following summarises the known distribution of the cats and otters in Latin America.

KEY: ? = may occur; (ex) = extinct, but did occur; (ex?) = did occur, but may now be extinct; I = species listed in CITES Appendix I (otherwise in Appendix II).

Lutrinae

Lutra felina I

Argentina (ex?), Chile, Peru

Lutra longicaudis I

Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador, French Guiana, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, Trinidad/Tobago, Uruguay, Venezuela

Lutra provocax I

Argentina, Chile

Pteronura brasiliensis I

Argentina, Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Paraguay, Peru, Suriname, Uruguay (ex?), Venezuela

Felidae

Felis colocolo

Argentina, Bolivia, Brazil, Chile, Ecuador, Paraguay, Peru, Uruguay

Felis geoffroyi

Argentina, Bolivia, Brazil, Chile, Paraguay, Uruguay

Felis guigna

Argentina, Chile

Felis jacobita I

Argentina, Bolivia, Chile, Peru

<u>Felis pardalis</u> (except ssp. <u>mearnsi</u> , and <u>mitis</u>)	Belize, Bolivia, Brazil, Colombia, Ecuador, El Salvador, French Guiana, Guatemala, Guyana, Honduras, Mexico, Peru, Suriname, Trinidad/Tobago, USA, Venezuela
<u>Felis pardalis mearnsi</u> I	Colombia?, Costa Rica, Nicaragua, Panama
<u>Felis pardalis mitis</u> I	Argentina, Brazil, Paraguay
<u>Felis tigrina</u> (except ssp. <u>oncilla</u>)	Argentina, Bolivia?, Brazil, Colombia, Ecuador, French Guiana, Guyana, Paraguay, Peru?, Suriname, Venezuela
<u>Felis tigrina oncilla</u> I	Costa Rica, Nicaragua?, Panama
<u>Felis wiedii</u> (except ssp. <u>salvinia</u> , and <u>nicaraguae</u>)	Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, French Guiana?, Guatemala, Guyana?, Mexico, Panama, Paraguay, Peru, Suriname, USA, Uruguay, Venezuela
<u>Felis wiedii nicaraguae</u> I	Costa Rica, Honduras, Nicaragua
<u>Felis wiedii salvinia</u> I	Belize?, El Salvador, Guatemala
<u>Panthera onca</u> I	Argentina, Belize, Bolivia, Brazil, Colombia, Costa Rica, Ecuador, El Salvador (ex), French Guiana, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Suriname, USA, Uruguay (ex), Venezuela

ARGENTINA

Species

- Lutrinae All native otters were listed as endangered in the national wildlife conservation legislation (Resolution No. 144).
- Lutra felina Possibly occurring in eastern Tierra del Fuego and Isla de los Estados (Cabrera, 1957) however there are no recent reports of its continued existence (Thornback and Jenkins, 1982).
- Lutra longicaudis
(longicaudis) Reasonably widespread in the north-east of the country. Decreased markedly since the 1930s (Garcia-Mata, 1978).
- Lutra provocax Once reported as extinct but recently found in reasonable numbers in remote and inaccessible areas of the Andes (Thornback and Jenkins, 1982). A survey conducted by Chehebar *et al.* (1986) indicated that the species was restricted to a small number of isolated areas between 39°S and 43°S. The only important and permanent population was found to inhabit Nahuel Huapi National Park.
- Pteronura brasiliensis
(paranensis) Found in the Parana and Uruguay Rivers and their tributaries (Cabrera, 1957).
- Felidae
- Felis colocolo
(budini, crespoi,
munoai, pajeros) Widespread but generally scarce according to Gonzalez, *in litt.*, 1986). Listed as vulnerable in Resolution No. 144 (see Legislation).
- Felis geoffroyi
(geoffroyi, paraguae,
salinarum) Widespread but scarce according to Gonzalez, *in litt.*, 1986). However Melquist (1984), two years earlier, reported it to be quite common and it was listed as "in no danger" in Resolution No. 144.
- Felis guigna
(guigna) Confined to a small area in Chubut and Santa Cruz on the east slope of the Andes (Cabrera, 1957). Listed as vulnerable in Resolution No. 144.
- Felis jacobita Found in the north-west of the country (Cabrera, 1957). Reported to be naturally very rare (Thornback and Jenkins, 1982). Listed as vulnerable in Resolution No. 144.
- Felis pardalis
(mitis) Restricted to the northern provinces from Misiones and Corrientes to Tucuman (Cabrera, 1957). Rare to uncommon (Anon., 1976); listed as endangered in Resolution No. 144.
- Felis tigrina
(guttula) Restricted to the northern provinces from Misiones to the Chaco of Salta (Cabrera, 1957). Reported to be rare to endangered in Salta (Mares *et al.*, 1981) and listed as endangered in Resolution No. 144.

Felis wiedii
(wiedii)

Found in the north, from Misiones to Tucuman (Cabrera, 1957). Described as rare to uncommon (Anon., 1976) and as rare to endangered in Salta province (Mares et al., 1981). Listed as vulnerable in Resolution No. 144.

Panthera onca
(palustris)

Found in the north in the Chaco and Corrientes (Cabrera, 1957). Population estimates vary from 200+ (Ellis, 1979) to probably less than 100 and endangered (Tarak, 1980 cited in Thornback and Jenkins, 1982). Listed as endangered in Resolution No. 144.

Legislation

Argentina ratified CITES in 1981 and the Convention came into force there on 8 April of that year.

Otter hunting was reportedly banned in Argentina in 1960 (Godoy, 1963 cited in Chehebar et al., 1986). Raw skins of Felis geoffroyi, Felis pardalis and Lutra longicaudis were banned from export under Resolution No. 134 of 13 May 1976. All native cat species, except Felis concolor, were banned from trade by Resolution No. 125 of June 1980. In 1981, all of the native cat and otter species were fully protected and banned from export by Reglamentation No. 691/81 under Ley No. 22.421. A list of protected species, classified by their population status, was included in Resolution No. 144 which was issued in March 1983. Although most aspects of the 1981 legislation applied throughout the country, intra-provincial trade may only have been controlled in Provinces which ratified the law; it is not known which Provinces have done so (Fuller and Swift, 1985). A further Resolution, No. 63, was introduced in March 1986, which prohibited internal trade of and reinforced the export ban on all of the native cats (CITES Notification No. 384, 7 May 1986). Resolution No. 852 of 11 December 1986 permitted a ninety-day term to trade skins of Felis tigrina, geoffroyi, guigna and colocolo (Villalba-Macias, in litt., 1986), this was introduced to dispose of old stocks of these skins. Under Resolution 852/86 the following exports were authorised during the first three months of 1987: 65 519 skins of F. geoffroyi; 15 865 skins of F. colocolo; 1 live F. concolor and; 1010 skins of F. tigrina. Neither the actual number of these skins exported or the destinations to which they were sent, are known.

Harvest and international trade

Chehebar et al. (1986) stated that skins of Lutra provocax were highly valued at the beginning of this century and that hunting pressure may have been intense at that time. The same author reported that, although L. provocax had suffered from heavy hunting pressure induced by high pelt values, which was thought to have been the cause of its decline and contraction in range, there was no evidence of recolonisation of its former by surviving populations after the hunting ban was enforced in 1960. The extent of illegal hunting in recent years remained unknown (Chehebar et al., 1986).

Despite the ban on internal trade in cat skins, which was introduced in early 1986, garments made from skins of Felis pardalis, F. geoffroyi, F. colocolo and F. wiedii continued to appear in fur shops in Buenos Aires during 1986 (Villalba-Macias, in litt., 1987).

Mares and Ojeda (1984) presented data describing wildlife exports from Argentina during the period 1976-1979. Felis geoffroyi and Felis colocolo were exported in large numbers (341 558 and 78 239 skins during the period

respectively). These were the only cat or otter species reported to have been exported in large quantities; while interviewing hunters the authors recorded at least one skin of Felis jacobita. Ojeda and Mares (1982) quoted port-of-export values of US\$ 51 for skins of F. geoffroyi and US\$ 37 for F. colocolo. They stated that the sale price of these skins in foreign markets may be 10-20 times more than the value declared at the port of export.

The CITES data illustrate the predominance of F. colocolo and F. geoffroyi in the Argentinian export trade. Very few skins were reported by CITES Parties as direct imports from Argentina after 1981. However far larger numbers of cat skins were reported as imports in the Customs reports of the Federal Republic of Germany in 1983 and 1984 suggesting that these may have actually been exported from Argentina in earlier years and re-exported to F.R. Germany from a third country. It is likely that most of the skins exported from Argentina are cured before export in order to comply with the 1976 ban on exports of raw skins of some species.

CITES data - Argentina

Argentina submitted annual reports to CITES for 1981 and all years since. The table shows, for each taxon and for each year, the minimum number of skins in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Lutrinae</u>										
<u>Lutrinae spp.</u>	-	73 (73)	1 (1)	-	-	-	-	-	-	-
<u>L. felina</u>	-	-	-	-	-	-	-	-	-	-
<u>L. longicaudis</u>	-	-	-	-	-	877 (0)	-	-	-	-
<u>L. provocax</u>	-	-	-	-	-	-	-	-	-	-
<u>P. brasiliensis</u>	-	-	-	-	-	-	-	-	-	-
<u>Felidae</u>										
<u>Felidae spp.</u>	-	1826 (1826)	25269 (25269)	-	-	-	-	-	-	-
<u>F. colocolo</u>	-	1 (1)	19 (19)	948 (948)	2180 (2132)	3866 (3866)	42 + 11p (0)	-	-	-
<u>F. geoffroyi</u>	174 (0)	3582 (3582)	15435 (15196)	15624 (15620)	8124 (7351)	1233 (1233)	3126 (1)	8 (8)	2024 (0)	-
<u>F. guigna</u>	-	-	-	-	-	-	-	-	-	-
<u>F. jacobita</u>	-	-	-	-	-	-	-	-	-	-
<u>F. pardalis</u>	605 (605)	-	534 (488)	-	47 (0)	1 (0)	1 (0)	-	-	-
<u>F. tigrina</u>	-	4045 (0)	-	-	1450 (1450)	1377 (0)	-	-	-	-
<u>F. wiedii</u>	-	274 (0)	-	380 (0)	-	-	-	-	-	-
<u>P. onca</u>	-	-	-	-	-	-	-	-	-	-

Total exports of spotted cat skins from Argentina (no. of skins except where stated)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
--	------	------	------	------	------	------	------	------	------	------

CITES data

Total exports	779	9728	41257	16952	11801	6477	3169	8	2024	0
Direct exports	605	5409	40972	16568	10933	5099	1	8	0	0

Customs data (imports)

F.R. Germany	74572	68118	47715	17343	4190	6225	-	10439	4503	-
France	3738	-	-	2597	-	-	-	3152	-	-
Italy	1300 kg	-	-	-	-	-	-	-	100 kg	-
Spain	?	?	?	?	38 kg	-	535 kg	8 kg	53 kg	-
UK	6903	2931	153	1	2079	-	-	-	-	-

Exports from
Argentina *

44099	141106	153364	81228
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* exports reported by Mares and Ojeda (1984) ? no data available for these years

BELIZE

Species

Lutrinae

Lutra longicaudis
(annectens)

Otters have been reported to remain in fair numbers (Florence, 1986) however no further information on population size or status is available.

Felidae

Felis pardalis
(pardalis)

Widely distributed and fairly common throughout the country (Weyer, 1982). Reportedly more common than F. wiedii (Florence, 1986).

Felis wiedii
(salvinia ?,
yucatanica)

The population was reported to remain fairly high though lower than that of Felis pardalis (Florence, 1986). Weyer (1982) reported that the Margay was little known by local people, often confused with the Ocelot but found to be extremely common in a number of locations.

Panthera onca
(goldmani)

Weyer (1982) reported that the Jaguar was common throughout most areas of the country. Further research by Rabinowitz indicated that a good, viable population remains in Belize. However hunting, resulting from a perception of the species as a threat to livestock, and forest clearance were thought to be potential threats (Anon., 1984b).

Legislation

Before 1981, Belize was a Party to CITES through the ratification by the United Kingdom. In 1986 Belize sent a declaration of succession to the CITES Secretariat, stating that they had considered themselves bound by the Convention since independence on 21 September 1981. Belize is now regarded as having been a Party since that date (Anon., 1986a).

The Wildlife Protection Act, Statutory Instrument No. 4 of 1981, imposed a seven-year ban on commercial trade in wildlife and wildlife products. The law also prohibits all hunting of species listed in the accompanying schedule, including all of the native cats and the other species. Such species may only be hunted under a special permit for scientific or educational purposes (Fuller and Swift, 1985).

Harvest and international trade

A number of hunters in Belize were interviewed by Weyer (1982) as part of a survey of the status of Jaguar; the majority stated that, with increased sugar cane production, there were few professional hunters in operation by 1982. Nevertheless poaching of Jaguars, which are perceived as threats to livestock, has remained a problem in recent years (Bohlen, 1987). Evidence suggested that some illegal trade continued after the hunting ban, Jaguar skins being sold in Mexico for about US\$ 250 (in 1982), however this trade was thought to exist only on a small scale (Weyer, 1982). No other information on the harvest of the native cats and otter is known.

Weyer (1982) stated that Government export figures for the years prior to the ban on wildlife exports were not available. The CITES and Customs data illustrate that Belize exported small numbers of skins until 1980; since then reported trade from this source has been negligible.

CITES data - Belize

Belize had not submitted any annual reports to CITES at the time that these data were analysed. However details of exports from Belize for 1980 were included in the UK annual report for that year. The table shows, for each taxon and for each year, the minimum number of skins in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Lutrinae</u>										
Lutrinae spp.	-	39 (39)	54 (54)	-	-	-	-	-	-	-
<u>L. longicaudis</u>	-	-	-	22 (22)	-	-	-	-	-	-
<u>Felidae</u>										
Felidae spp.	-	43 (43)	-	-	-	-	-	-	-	-
<u>F. pardalis</u>	-	62 (62)	408 (408)	107 (107)	181 (181)	-	68 (1)	28 (2)	1 (1)	-
<u>F. wiedii</u>	-	90 (90)	185 (185)	157 (157)	160 (160)	2 (2)	-	-	-	-
<u>P. onca</u>	-	-	-	-	-	1 (1)	-	-	-	-

<u>Total exports of spotted cat skins from Belize (no. of skins)</u>										
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<hr/>										
CITES data										
Total exports	-	152	593	264	341	3	68	28	1	-
Direct exports	-	152	593	264	341	3	1	2	1	
<hr/>										
Customs data (imports)										
F.R. Germany	504	642	739	-	-	-	-	-	-	-
<hr/>										

BOLIVIA

Species

Lutrinae

Lutra longicaudis (longicaudis)

Grimwood (1978 cited in Thornback and Jenkins, 1982) believed that the species occurred in the Pilcomayo/Paraguay drainage of south-east Bolivia.

Pteronura brasiliensis (brasiliensis?)

A remnant population is believed to remain (Thornback and Jenkins, 1982). Population size is unknown but probably very low (Duplaix in litt., 1980 cited in Thornback and Jenkins, 1982).

Felidae

Felis colocolo (budini?, crespoi?, garleppi)

Found in the west of the country and possibly in Chaco areas to the south adjoining Argentina (Cabrera, 1957). Population and status are unknown.

Felis geoffroyi (euxantha)

Found in southern areas on the eastern slope of the Andes (Cabrera, 1957). Population and status are unknown.

Felis jacobita

Restricted to high mountainous areas in the south-west (Cabrera, 1957). Bejarano (1981 cited in Thornback and Jenkins, 1982) described its status as rare.

Felis pardalis (steinbachi)

Distribution is poorly known. Reported to occur in central areas (Cabrera, 1957). Melquist (1984) assumed that it also occurred in tropical forests, Llanos and Chaco in the east of the country. Described in 1981 as endangered (Bejarano, 1981 cited in Thornback and Jenkins, 1982).

Felis tigrina ?

Melquist (1984) suggested that this species probably occurred in Bolivia, however it has never been confirmed as a resident of the country.

Felis wiedii (bolivae)

Described by Cabrera (1957) as occurring in the Department of Santa Cruz. Listed in 1981 as endangered (Bejarano, 1981 cited in Thornback and Jenkins, 1982).

Panthera onca (palustris)

Reported to occur in the south of the country, east of the Andes (Cabrera, 1957). Described in 1981 as endangered (Bejarano, 1981 cited in Thornback and Jenkins, 1982).

Legislation

CITES came into force in Bolivia on 4 October 1979. Bejarano (pers. comm. cited in Melquist, 1984) stated that the Bolivian Government banned the hunting of cats for five years in 1967 but they later concluded that this caused lost revenue and had little effect on population decline. Decreto Supremo No. 16605 of June 1979 declared a total ban on hunting and trade of species listed as in danger of extinction. This list included all of the native cat species but not the otters. Controversy exists over the validity of this decree owing to alleged mistakes in the species listings. On May 1

1984, a ban was placed on the export of all live wildlife, which was extended on August 2 1985 to include wildlife products (Fuller and Swift, 1985). The export ban was further extended in June 1986 to ban all capture, manufacture, trade and export of live wild animals and their products for three years (CITES Notification No. 413, 28 November 1986).

Harvest and international trade

The Verband der Deutschen Rauchwaren und Pelzwirtschaft (German Fur Trade Association) has stated that, during the 1970s, Bolivia was one of the three major exporting countries of spotted cat skins (mainly F. wiedii, pardalis and geoffroyi) (Langenberger in litt., 1986). A major German skin trader also named Bolivia as one of the major sources of cat and otter skins during this period (Fehns in litt., 1986). In 1981, a Bolivian trader reported that trade in Ocelot (probably including other small cats) and Jaguar had declined drastically owing to controls on their export. The same trader stated that Felis jacobita was not found in trade (Hansen in litt., 1981), although an earlier report stated that the species was being slaughtered at a great rate to supply a German skin trader (Cordier in litt., 1974).

Bejarano (pers. comm. cited in Melquist, 1984) stated that most of the skins harvested in Bolivia were exported to Paraguay and that, even in 1984, 8-10 Jaguar and 100 small spotted cat skins were being exported each month. Other reports suggested that Cochabamba and Santa Cruz were major illegal trade centres and that a number of towns on the Brazilian border provided smuggling routes from that country into Bolivia (Melquist, 1984).

The CITES statistics indicate that over 30 000 cat skins (mainly geoffroyi and tigrina) were exported in 1984. The large number of skins recorded in Customs reports as having been imported into F.R. Germany in 1985, were not reflected in the CITES data for that year; these skins may have been routed via France, the discrepancy between the two data sources having been caused by different reporting methods.

CITES data - Bolivia

Bolivia has submitted one annual report to CITES, covering the period 1981 to March 1983. The table shows, for each taxon and for each year, the minimum number of skins in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Lutrinae										
Lutrinae spp.	-	-	1374 (1374)	-	-	-	-	-	-	-
<u>L. longicaudis</u>	-	-	-	40 (0)	24 (0)	-	-	-	-	-
<u>P. brasiliensis</u>	-	-	-	-	-	-	-	-	-	-
Felidae										
Felidae spp.	-	-	210 (210)	-	-	-	-	-	-	-
<u>F. colocolo</u>	-	-	-	-	7 (7)	-	-	-	-	-
<u>F. geoffroyi</u>	-	-	-	-	-	1 (1)	-	3310 (3310)	13844 (13844)	1751 (1683)
<u>F. guigna</u>	-	-	-	-	-	-	-	-	-	-
<u>F. jacobita</u>	-	-	-	-	-	-	-	-	-	-
<u>F. pardalis</u>	-	-	240 (0)	-	-	2 (2)	-	4 (4)	1500 (1500)	-
<u>F. tigrina</u>	-	-	-	-	-	-	-	-	15482 (15482)	2039 (1635)
<u>F. wiedii</u>	-	-	1691 (300)	-	-	-	-	-	-	-
<u>P. onca</u>	-	-	-	-	5 (5)	5 (5)	2 (2)	2 (2)	-	-

Total exports of spotted cat skins from Bolivia (no. of skins)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
CI'ES data										
Total exports	0	0	2141	0	12	8	2	3316	30826	3790
Direct exports	0	0	2141	0	12	8	2	3316	30826	3318
Customs data (imports)										
F.R. Germany	-	7580	10956	-	-	-	-	6166	10312	28957
France	-	-	-	-	-	-	-	-	9139	-
UK	-	4810	-	-	-	-	-	-	-	-

BRAZIL

Species

Lutrinae

Lutra longicaudis
(longicaudis, enudris)

Distribution is poorly known but generally the species is found in the Parana and Amazon River systems (Zyll de Jong, 1972). Population size and status are unknown. It was included on the Brazilian Endangered Species List (Thornback and Jenkins, 1982).

Pteronura brasiliensis
(paranensis,
brasiliensis)

Remnant populations were reported to remain in the eastern rivers and northern and central areas of the Brazilian Amazon (Best and Ayres, 1981 cited in Thornback and Jenkins, 1982).

Felidae

Felis colocolo
(braccata, munoi)

Found in the southern interior of the country as far north as the Mato Grosso plateau and the district of Goias (Cunha Vieira, 1955). Population size and status unknown.

Felis geoffroyi
(paraguae)

Restricted to the far south of the state of Rio Grande do Sul (Cunha Vieira, 1955). The species was described as generally common by Koford (1973b). However the population size and status in Brazil are unknown.

Felis pardalis
(maripensis, mitis,
steinbachi ?)

Found in the north-east areas bordering the Guyanas (Cabrera, 1957), central and eastern areas south of the Amazon basin to the Rio Grande do Sul (Cunha Vieira, 1955) and possibly in the region bordering Bolivia (Cabrera, 1957). Smith (1976) stated that the population was thought to have remained stable despite heavy hunting pressure. Later described as vulnerable by Ayres and Best (1981 cited in Thornback and Jenkins, 1982).

Felis tigrina
(guttula, tigrina)

Distribution poorly known; reported to occur in central and southern regions and in the far north-east of the country (Cunha Vieira, 1955). Koford (1973b) described the species as rare in most areas of its range. Melquist (1984) stated that it was probably declining in most regions of Brazil, with the exception of some isolated areas and large protected areas.

Felis wiedii
(amazonica, bolivae,
vigens, wiedii)

Widely distributed. Described as occurring in the basins of the Solimoes and Marañon Rivers and their tributaries, Mato Grosso state (Cabrera, 1957), the east of the state of Para and in southern and eastern regions from Bahia south to the Rio Grande do Sul (Cunha Vieira, 1955) but it is doubtful that the population is continuous throughout the country. Respondents to a questionnaire survey indicated that the species was common and widespread in the Amazon basin, but rare in central and southern parts of the country (Melquist, 1984).

Panthera onca
(palustris, onca,
peruviana?)

Described as occurring throughout most areas of the country (Cabrera, 1957). However recent reports state that it has been eradicated from large areas of its former distribution and that only isolated populations remain. The Pantanal of Mato Grosso was thought to be an important stronghold (Cranshaw, 1986).

Legislation

Brazil ratified CITES in 1975 and the Convention came into force there on 4 November of that year. All trade in wild fauna was prohibited in 1967 under Lei No. 5197. Some stockpiled skins were allowed to be exported until the early 1970s; after 30 April 1971 commercial hunting was declared totally illegal. Permits may be issued for sport hunting and for scientific purposes, however their issuance is controlled by stringent regulations. Both otter species were fully protected from any exploitation by Portaria No. 681 of 28 December 1967 and the Jaguar and the otters were included in a list of Brazil's endangered species fully protected from hunting under Portaria No. 3481 of 31 May 1973 (Fuller and Swift, 1985).

Harvest and international trade

McGrath (1986) described the several phases through which the skin trade has passed in Brazil. Until the mid-1920s only small numbers of Jaguar and otter skins were traded, the majority of skins in trade at the time having been from deer. From the 1920s to the end of World War II, the skin trade diversified as tanning methods improved and a larger number of species were involved. It was in the period from the late 1940s to 1971 that the Brazilian skin trade was at its peak. Professional hunters moved into the more isolated areas of the country to hunt cats and otters.

Smith (1976) stated that the skin trade increased dramatically in the early 1960s and that, by the later years of that decade, he estimated that as many as 15 000 Jaguars and 80 000 Ocelots were being shot every year in the Brazilian Amazon for the skin trade. Smaller numbers of other spotted cats were commonly traded, including F. wiedii, F. tigrina and F. geoffroyi (Doughty and Myers, 1971). During the same period around 5000 Giant Otter skins were exported each year (see Table 2), along with smaller numbers of River Otters (Smith, 1981).

Table 2

Exports of Pteronura brasiliensis skins from Brazil, 1960-1969.

(Value = Cruzeiros per skin) Source: Anuario Estatistico do Brasil
(1963, 1965, 1967, 1970)

Year	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	TOTAL
No. skins	4929	3971	4979	6228	5496	6099	4367	4594	4674	5305	50642
Value	5	5	9	24	29	102	48	54	65	67	

Otter skins were obtained throughout most of Brazil; the most important sources having been the Amazonian states of Amazonas and Para. The major exporting locations were Manaus in Amazonas and Belem in Para (Doughty and Myers, 1971).

The ban on commercial hunting imposed in 1967 caused a great deal of protest by skin dealers and the Brazilian Government conceded a four year grace period for the dealers to liquidate old stocks. Over the next few years hunting pressure and trade intensified, however after 30 April 1971 commercial hunting was declared totally illegal. The political power of the hunting lobby was again demonstrated in 1974 when commercial hunting was again opened for an eight-month period (McGrath, 1986). In interior areas of the country hunting and trade carried on more or less openly, with export mainly by boat through Leticia, Colombia and by light aircraft through the Guyanas (Smith, 1976).

Table 3

Prices paid to hunters for top quality skins, 1971-1973 (Smith, 1976)
(prices in US \$)

Year	<u>Panthera onca</u>	<u>Felis pardalis</u>
1971	80	15
1972	130	40
1973	100	30

Cranshaw (1986) stated that although the Jaguar had been protected in Brazil since 1967, it was heavily hunted wherever it came into contact with man, either to protect livestock or to obtain skins. A census of confiscated skins held by regional IBDF offices in Brazil which was carried out in 1982, gave a reasonable indication of the species which were still hunted illegally and their relative frequency of occurrence in trade. A total of 26 880 confiscated carnivore skins from 14 Brazilian states included 455 Felis pardalis skins, 149 Felis wiedii skins, 247 Panthera onca skins, 547 Lutra longicaudis skins and 154 Pteronura brasiliensis skins (Duarte and Rebelo, 1985).

The illegal trade is thought to have continued at high levels until 1984 when a number of smuggling routes were closed. Since 1984 there have been some indications that trade has been controlled; otter, Jaguar and Ocelot skins had very low market prices on the Solimoes in 1985 and 1986, however there has been some recent evidence of trade in otters and spotted cats and it is likely that some residual commercial hunting and trade continues (McGrath, 1986).

Exports

During the late 1960s Brazil was probably the largest exporter of cat and otter skins from Latin America (Paradiso, 1972). Records of imports of Jaguar and Ocelot skins into the USA during 1968-69 presented by Smith (1976) indicated that approximately 60% of the skins in trade were of Brazilian origin. Substantial direct imports from Brazil were reported in CITES data as recently as 1977, and the Customs data include imports of this origin up to 1980. The CITES data indicate direct imports of almost 4000 spotted cat skins in 1977, however the Customs data indicate far larger numbers of skins in international trade from this source; over 34000 spotted cat skins were reportedly imported into F.R. Germany from Brazil in 1980 according to the German Customs records. Considering the fact that exports were banned in 1967 and that old stocks should not have been exported after 1971, recent international trade data may indicate that illegal international trade from this source continued through the 1970s.

CITES data - Brazil

Brazil submitted annual reports to CITES for the years 1978 to 1981, however no other reports have been submitted for previous or subsequent years. The table shows, for each taxon and for each year, the minimum number of skins in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Lutrinae</u>										
<u>L. longicaudis</u>	-	-	-	-	-	-	-	-	-	-
<u>P. brasiliensis</u>	-	-	-	-	-	1 (1)	-	-	-	-
<u>Felidae</u>										
<u>F. colocolo</u>	-	-	-	-	-	-	-	-	-	-
<u>F. geoffroyi</u>	-	-	-	-	-	-	-	-	-	-
<u>F. pardalis</u>	6059 (1477)	1491 (1491)	1465 (0)	36 (0)	-	114 (2)	50 (0)	10 (0)	-	-
<u>F. tigrina</u>	4000 (4000)	2146 (1746)	-	-	-	-	-	-	-	-
<u>F. wiedii</u>	1565 (1565)	1324 (750)	26 (0)	358 (0)	1 (1)	-	-	1 (1)	-	-
<u>P. onca</u>	470 (111)	20 (0)	-	-	-	-	-	-	-	-

Total exports of spotted cat skins from Brazil (no. of skins except where kg indicated)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
CITES data										
Total exports	12094	4981	1491	394	1	114	50	11	-	-
Direct exports	7153	3987	0	0	1	2	0	1	-	-
Customs data (imports)										
Belgium	-	-	-	-	4022	-	-	-	-	-
F.R. Germany	95411	75262	65053	61400	34108	-	-	-	-	-
France	-	-	-	22082	10438	-	-	1499	-	-
Italy	1600 kg	3300 kg	-	-	-	-	-	-	-	-
UK	12408	3995	1917	-	-	-	-	-	-	-

CHILE

Species

Lutrinae

Lutra felina

Formerly occurred more or less continuously along the pacific coast of Chile but more recently it has been restricted to isolated areas by extensive hunting for its pelt (Cabello, 1985). Various reports indicate that stable populations remain in some areas, though in others the species has been virtually eliminated (Thornback and Jenkins, 1982) and it is generally considered endangered (Miller et al., 1983). One FAO report (see Thornback and Jenkins, 1982) quoted an unconfirmed estimate that the total population of the species was less than 1000 animals, however recent density estimates indicate that the population could be far higher in Chile alone (Cabello, 1985).

Lutra provocax

Reportedly eliminated from central Chile and reduced to small, isolated and remote populations in south-central and southern regions (Miller et al., 1983). Recent reports have indicated that the species has disappeared from most of its range, although one survey in the Aysen area found the species to have been common (Thornback and Jenkins, 1982). Considered endangered (Miller et al., 1983).

Felidae

Felis colocolo

(colocolo, garleppi?
pajeros?)

Found in central regions, in the far north (Miller et al., 1983) and perhaps in the southern Patagonian/Fuegian forest (Taber, 1974). Described as generally rare and increasingly uncommon by Miller et al. (1983).

Felis geoffroyi

(geoffroyi)

Restricted to the pampas of southern Chile along the border with Argentina. Status inadequately known; possibly vulnerable (Miller et al., 1983).

Felis guigna

(guigna, tigrillo)

Found in central and south-central regions. Reportedly endangered in the agricultural heartland of central Chile but more abundant, although inadequately known, towards the south of its range (Miller et al., 1983).

Felis jacobita

Reported by Pine et al. (1979) to have been restricted to areas in the north-east of the country above approximately 3000 m from Choapa province north to the Peruvian border. Very few reliable recent records are known. At least vulnerable and perhaps the most threatened species of cat in Chile (Miller et al., 1983).

Legislation

CITES entered into force in Chile on 1 July 1975. Both other species were fully protected from hunting and trade under Ley No. 4601 of 1929 (implemented by Decreto No. 4844). Subsequently more effective protection was afforded by

Decreto No. 40 of 22 February 1972 which prohibited all hunting, transport or commercialisation of listed mammal and bird species, including their products. The list of protected species included the otters and all native Felidae. Hunting or collection for scientific or educational purposes requires a special permit (Fuller and Swift, 1985).

Harvest and international trade

The two native otter species were reportedly among the principle mammals hunted for pelts during the past centuries (Iriarte and Jaksic, 1986). Despite the fact that both otter species were protected in 1929, heavy and excessive hunting for their skins continued, especially during the 1940s (Benoit pers. comm. cited in Melquist, 1984). Miller *et al.* (1983) stated that L. felina was still under heavy hunting pressure and that L. provocax was hunted for its valuable skin and also as a supposed predator of fish and bivalves. Cabello (1985) reported that illegal hunting and trade has continued (the greatest pressure being on L. felina) albeit at a lower level than in the past owing to better implementation of legislation, restrictions on the use of firearms and general market recession. In 1977 hunters received about US\$15 for a Lutra felina skin, while a local dealer would expect US\$75 a skin. The skins were reportedly exported illegally to Argentina; important trade centres were Puerto Montt, Castro, Melinka, Puerto Aysen and Punta Arenas (Cabello, 1978). By 1979 the value to a hunter of a skin of Lutra felina was US\$37, over twice the figure quoted for 1977 (Cabello, 1979, cited in Thornback and Jenkins, 1982).

Miller *et al.* (1983) attempted to assess the principal reasons for the decline of various Chilean mammals. Exploitation for meat and skins by rural workers supplementing their diets or income by hunting was identified as the primary cause of the decline of populations of Felis geoffroyi, Lutra provocax and L. felina and as a secondary reason for the decline of Felis guigna and F. colocolo. They reported that F. colocolo was hunted in central Chile, that F. geoffroyi was intensively hunted wherever it occurred and that F. guigna had been heavily overhunted in the past. The most valuable skins in Chile were reported to be those of F. geoffroyi.

Table 4 Number of wild cat and otter skins exported from Chile (1910-84)

SOURCE: Iriarte and Jaksic (1986); obtained from the National Bureau of Statistics, Chile.

Year	Otters	Wild cats
1910-14	6499	0
1915-19	2128	0
1920-24	18550	0
1925-29	3408	0
1930-34	4415	214
1935-39	1446	1259
1940-44	668	703
1945-49	1129	776
1950-54	20	0
1955-59	0	0

1960-1984 - no trade

Table 4 indicates that reasonably small numbers of cat and otter skins were declared as legal exports from Chile. This contrasts with the reports noted above of large-scale hunting. This could be explained if most of the skins obtained by hunters had been used internally within Chile. The data presented in Table 4, however, take no account of illegal exports.

The CITES and Customs data also indicate that there has been negligible trade in cats and otters from Chile since the mid-1970s.

CITES data - Chile

Chile has submitted Annual reports to CITES for 1977, 1979, 1982 and 1983. The table shows, for each taxon and for each year, the minimum number of skins in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

spe = dead specimen

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Lutrinae</u>										
<u>L. felina</u>	-	-	-	-	-	-	-	-	-	-
<u>L. provocax</u>	-	-	-	-	-	-	-	-	-	-
<u>Felidae</u>										
<u>F. colocolo</u>	-	-	-	-	-	-	-	-	-	-
<u>F. geoffroyi</u>	-	-	-	-	-	-	-	-	-	-
<u>F. guigna</u>	-	-	-	-	5 spe	-	-	-	-	-
<u>F. jacobita</u>	-	-	-	-	-	-	-	-	-	-

No imports from Chile were reported in the Customs data analysed.

COLOMBIA

Species

Lutrinae

Lutra longicaudis
(enudris, annectens)

Found throughout most of the country. Less abundant than in the past but much less vulnerable than Pteronura brasiliensis. Hunted near to extinction in some areas (Donadio, 1978).

Pteronura brasiliensis
(brasiliensis)

Restricted to a number of isolated populations. Reported to remain reasonably common in the Tuparro National Park in the Orinoco drainage, in the Comisaria del Vichada and in the Mesay River, Caqueta and Apaya River (Hernandez-Camacho in Thornback and Jenkins, 1982). Generally, however, the species has been extirpated from most areas and has been described as seriously endangered (Donadio, 1978).

Felidae

Felis pardalis
(aequatorialis,
mearnsi?,
pseudopardalis)

Distribution unknown. Cabrera (1957) indicated that most areas of the country were within the range of the species. Hall (1981) suggested that the Appendix I subspecies mearnsi almost certainly extended into Colombia from Panama. No information on population size and status.

Felis tigrina
(pardinoides)

Hernandez-Camacho (pers. comm. cited in Melquist, 1984) reported that this species was restricted to the montane and cloud forests of the Andean ranges at elevations above 1500 m, however Melquist (1984) suggested that it probably also occurred in tropical moist forest and gallery forest. No information on population size and status.

Felis wiedii
(pirrensis)

Found in the Andean zone (Cabrera, 1957) and possibly more widespread into lowland forest areas in the south-east (Melquist, 1984). No information on population size and status.

Panthera onca
(centralis)

Found in mountainous regions of the country (Cabrera, 1957); perhaps more widespread (Melquist, 1984). Koford (1974) reported that the species had declined considerably since the early 1960s in the eastern llanos region.

Legislation

CITES entered into force in Colombia on 29 November 1981. Both other species were fully protected from hunting and trade by Resolution 574 of 24 July 1969. Under this legislation, accredited scientific institutions and museums could be authorised to hunt up to two specimens for scientific purposes. This hunting prohibition was confirmed by Resolution 848 of 6 August 1973, under which the native cat species were also fully protected (Fuller and Swift, 1985). Therefore all legal exports of cat and other skins stopped on 15 October 1973 (Donadio, 1978). These hunting controls have been updated and

reinforced by Decreto Ley No. 2811 of 1974 and Decreto No. 1608 of 1978 (Fuller and Swift, 1985).

Harvest and international trade

Before the 1973 export ban, Colombia was one of the major exporters of Jaguar and Ocelot skins (Koford, 1974). In 1972 alone a total of 12 780 skins of Lutra longicaudis, 8 skins of Pteronura brasiliensis, 1601 Panthera onca skins, 17 809 Felis pardalis and Felis wiedii skins and 5079 Felis tigrina skins left Leticia on the Amazon. The majority of these skins, with the exception of those of Lutra longicaudis, were sent to Bogota rather than exported directly from Leticia (Foote and Scheuerman, 1973). Despite the fact that otters were fully protected from July 1969, large numbers continued to be exported until 1973. Donadio (1978) compiled the following skin export figures from INDERENA records.

Table 5 Exports of otter skins from Colombia

	<u>L. longicaudis</u>	<u>P. brasiliensis</u>
1965*	1232	1032
1970	6246	311
1971	6797	85
1972	7845	32

* February to May

The export figures for 1965 show that both otter species were traded in similar proportions in contrast to the uneven numbers exported in later years. After 1973 legal trade stopped and no information was available on illegal trade. Donadio (1978) reported that such official export figures represented as little as 50% of the actual trade.

Since the early 1970s there have been a number of skin smuggling scandals involving officials of INDERENA (Melquist, 1984). However some of the hunting pressure has reportedly been reduced owing to a shift of effort to the more lucrative trade in cocaine (Medem, pers. comm. cited in Melquist, 1984). The German Customs data indicate a trade of several thousand cat skins from Colombia up to 1980.

CITES data- Colombia

Colombia submitted annual reports to CITES for 1984 and 1985. The table shows, for each taxon and for each year, the minimum number of skins in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Lutrinae</u>										
<u>L. longicaudis</u>	-	-	-	60 (0)	-	-	-	-	-	-
<u>P. brasiliensis</u>	-	-	-	-	-	-	-	-	-	-
<u>Felidae</u>										
<u>F. pardalis</u>	1119 (0)	264 (264)	-	-	6 (6)	15 (15)	12 (12)	13 (9)	1 (1)	-
<u>F. tigrina</u>	-	-	-	-	-	-	-	-	-	-
<u>F. wiedii</u>	2596 (0)	101 (101)	-	-	286 (0)	116 (0)	5 (5)	2 (2)	-	-
<u>P. onca</u>	-	-	1 (1)	-	2 (2)	1 (1)	1 (1)	1 (1)	-	-

Total exports of spotted cat skins from Colombia (no. of skins)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>CITES data</u>										
Total exports	3715	365	1	-	294	132	18	16	1	-
Direct exports	0	365	1	-	8	16	18	12	1	-
<u>Customs data (imports)</u>										
F.R. Germany	15248	4456	2253	1483	3004	-	-	-	-	-

COSTA RICA

Species

Lutrinae
Lutra longicaudis
(annectens)

Considered common in streams throughout the country (Lopez pers. comm. cited in Melquist, 1984). Not included in a list of the country's endangered fauna (Mena Moya, 1978).

Felidae
Felis pardalis
(mearnsi)

Reportedly found throughout much of the country in most habitat types (Vaughan, 1983). Illegal skin trade has caused a great reduction in the population size; generally considered endangered (Mena Moya, 1978). Population estimates vary from 200 (Lopez pers. comm. cited in Melquist, 1984) to 2000-3000 in large forest areas alone (Vaughan, 1983).

Felis tigrina
(oncilla)

Found throughout the country with the exception of the Atlantic zone. Listed by Mena Moya (1978) as endangered. Highly adaptable, but often confused with Felis wiedii (Vaughan, 1983).

Felis wiedii
(nicaraguae,
pirrensis)

Fairly widespread. The Appendix I subspecies nicaraguae has been reported to be the most widespread, pirrensis only occurring in the Sixaola region near the border with Panama (Mena Moya, 1978). Described as endangered (Lopez, 1978).

Panthera onca
(centralis)

Reported to occur in both coastal regions, especially in areas of primary forest (Vaughan, 1983). Reportedly endangered (Lopez, 1978). Lopez (pers. comm. cited in Melquist, 1984) estimated a population of less than 100 animals while Vaughan (1983) estimated a population several times larger.

Legislation

Costa Rica ratified CITES in 1975 and the Convention came into force on 28 September of that year. All commercial hunting of and trade in non-marine wildlife and wildlife products was prohibited in 1970 under Ley No. 4551 and Decreto No. 2716. However a list of hunting seasons in 1974/1975 indicated that Lutra longicaudis was at that time protected by a four-month closed season, while all of the cat species were totally protected (Anon., undated) the reason for this apparent contradiction of Ley No. 4551, with respect to the River Otter, is uncertain.

Protection was continued by Ley No. 6919 of 1983 (implemented by Decree No. 15895-MAG of 10 April 1984). The only exceptions to this protection were specimens from registered captive-breeding operations and species designated harmful to agriculture. All of the native cat species were included in a list of endangered species which are not permitted to be held in captivity, as well as being fully protected from hunting, under Decree No. 15985-MAG of 29 October 1984. Non-commercial export of non-endangered species may be permitted for scientific purposes (Fuller and Swift, 1985).

Harvest and international trade

Illegal skin trade has greatly reduced the numbers of the cat species (Mena Moya, 1978). Melquist (1984) reported that spotted cats were occasionally killed by peasants, to supply the tourist trade, and by sport hunters. Ocelot skins were found to be on sale in San Jose but there was no evidence of large scale commercial activities. Prior to 1981 there were enforcement problems caused by a lack of authorised wildlife inspectors (Lopez pers. comm. cited in Melquist, 1984).

The data obtained from the Annual reports of CITES Parties and the compiled Customs statistics contain very little information on trade from this source.

CITES data - Costa Rica

Costa Rica submitted annual reports to CITES for 1975, 1976, 1977, 1978, 1982, 1983 and 1984. The table shows, for each taxon and for each year, the minimum number of skins in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Lutrinae</u>										
<u>L. longicaudis</u>	-	-	-	-	-	-	-	-	-	-
<u>Felidae</u>										
<u>F. pardalis</u>	-	-	-	-	1 (1)	-	-	-	-	-
<u>F. tigrina</u>	-	-	-	-	-	-	-	-	-	-
<u>F. wiedii</u>	-	-	-	-	-	-	-	1 (1)	1 (1)	-
<u>P. onca</u>	-	-	-	-	-	-	-	1 (1)	-	-

Total exports of spotted cat skins from Costa Rica (no. of skins)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>CITES data</u>										
<u>Total exports</u>	-	-	-	-	1	-	-	2	1	-
<u>Direct exports</u>					1			2	1	

No exports in Customs data

ECUADOR

Species

Lutrinae

Lutra longicaudis
(annectens, enudris)

Found throughout most of the country, both east and west of the Andes. Still fairly common throughout most parts of its distribution, especially east of the Andes (Melendres, 1978).

Pteronura brasiliensis
(brasiliensis)

Found only in lowland tropical forest in the east of the country. Very few recent records are known; extremely rare and reportedly endangered (Melendres, 1978).

Felidae

Felis colocolo
(thomasi)

Inhabits the sierra zone (Cabrera, 1957). Population and status unknown.

Felis pardalis
(aequatorialis,
pusaea)

Cabrera (1957) described the species as occurring in the montane zone and in the south-west in coastal regions. All of the spotted cats were considered rare by respondents to a questionnaire (Melquist, 1984).

Felis tigrina
(pardinoides)

Found in the Andean zone (Cabrera, 1957). Considered rare (Melquist, 1984).

Felis wiedii
(pirrensis)

Found on the western side of the Andes in most coastal provinces (Baker, 1974) and possibly on the eastern side of the Andes (Melquist, 1984). The species has suffered from habitat loss through widespread deforestation (Ortiz-Crespo, 1981 cited in Thornback and Jenkins, 1982); generally considered rare (Melquist, 1984).

Panthera onca
(centralis?)

Very little distribution information is available. Reportedly almost extirpated from the Costa region (Ortiz-Crespo pers. comm. cited in Melquist, 1984).

Legislation

CITES has been in force in the country since 1 July 1975. Decreto No. 818 of 20 November 1970 referred to schedules listing species the hunting of which was banned or regulated. Pteronura brasiliensis was totally protected and Lutra longicaudis was subject to limited hunting seasons (Melendres, 1978) but the status of the cat species is not certain. In 1981 Ley No. 74 was introduced banning all exports of indigenous wildlife except for scientific or educational purposes. The implementing regulations passed on 16 February 1983 (Decree No. 1529) were confusingly different to Ley No. 74 as they apparently allowed the authorisation of exports of wildlife species which had reached population levels which disturb ecological balance and exports of species managed in captivity. Article 47 of the regulations even allowed the Ministry to fix quotas for export of non-protected wildlife. Despite these provisions Ecuador has reportedly not allowed any commercial wildlife exports since early 1983 (Fuller and Swift, 1985).

Harvest and international trade

Attempts have been made to control commercial skin exports since 1970. Most commercial hunting has been halted, although the great financial incentive of illegal hunting to local people remains a problem. Some illegal trade has continued and a number of reports suggest that cat and otter skins are openly sold in some towns. A government inspection of a skin trader's premises in Quito in 1977 revealed a total of 122 small cat skins, 27 otter skins and 1 Jaguar skin on sale (Melendres, 1978). More recently Melquist (1984) observed small numbers of Jaguar, Ocelot, Margay and Lutra skins on sale in Quito, Cotacachi and Santa Domingo de los Colorados. No details of large-scale commercial trade are known.

Both CITES and Customs data indicate that very little trade from this source has taken place since the mid 1970s. The export of around 400 skins of Felis pardalis and F. wiedii in 1978 was the last substantial commercial trade reported from this source.

CITES data - Ecuador

Ecuador submitted annual reports to CITES for 1977, 1980, 1981 and 1982. The table shows, for each taxon and for each year, the minimum number of skins in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Lutrinae</u>										
<u>L. longicaudis</u>	-	-	-	-	-	-	-	-	-	-
<u>P. brasiliensis</u>	-	-	-	-	-	-	-	-	-	-
<u>Felidae</u>										
<u>F. colocolo</u>	-	-	-	-	-	-	-	-	-	-
<u>F. pardalis</u>	-	-	195 (195)	-	3 (3)	8 (7)	23 (21)	3 (2)	3 (1)	-
<u>F. tigrina</u>	-	-	-	-	-	-	-	-	-	-
<u>F. wiedii</u>	-	-	221 (221)	-	-	1 (1)	3 (3)	-	-	-
<u>P. onca</u>	-	-	-	-	1 (1)	-	-	-	-	-

Total exports of spotted cat skins from Ecuador (no. of skins)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>CITES data</u>										
Total exports	-	-	416	-	4	9	26	3	3	-
Direct exports	-	-	416	-	4	8	24	2	1	-

Customs data (imports)
F.R. Germany

2096	-	482	-	-	-	-	-	-	-	-
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EL SALVADOR

Species

Lutrinae
Lutra longicaudis
(annectens)

Occurrence indicated by Hall (1981). No information on population size or status.

Felidae
Felis pardalis
(pardalis)

Occurrence reported by Hall (1981); described by Serrano (1978) as endangered. A report in 1979 indicated that the species was rare and confined to two forests: Montecristo and El Imposible (Boursot, 1979 cited in Thornback and Jenkins, 1982).

Felis wiedii
(salvinia)

Specimens were collected in 1961 from Mt Cocaguatig and Colinas de Jucuaran (Hall, 1981). Boursot (in Thornback and Jenkins, 1982) reported in 1979 that this species was much commoner than Felis pardalis, although it was still listed as vulnerable by Serrano (1978).

Panthera onca
(centralis)

El Salvador was described as the northern limit of the subspecies centralis (Hall, 1981). Recent reports indicate that the species has become extinct in the country (Boursot, 1979 cited in Thornback and Jenkins, 1982; Serrano, 1978).

Legislation

In late April 1987 El Salvador reportedly deposited its instrument of ratification of CITES with the Swiss Government. Therefore CITES should enter into force there in late July 1987. Previously, El Salvador has not enacted any wildlife legislation, although a wildlife law was reportedly in preparation. Regulations restricting the hunting of certain species have been introduced occasionally, but the native cats and the other species are not known to have been included under such controls (Fuller and Swift, 1985).

Harvest and international trade

Very little information is known. Serrano (1978) mentioned that the small spotted cats were hunted and utilised for their skins. However, with the exception of 809 skins imported into F.R. Germany from this source in 1976, international trade from El Salvador since 1975 seems to have been negligible.

CITES data - El Salvador

El Salvador is not party to CITES. The table shows, for each taxon and for each year, the minimum number of skins in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Lutrinae</u>										
<u>L. longicaudis</u>	-	-	-	-	-	-	-	-	-	-
<u>Felidae</u>										
<u>F. pardalis</u>	-	-	-	-	-	1 (1)	-	-	-	-
<u>F. wiedii</u>	-	-	-	-	-	-	-	-	-	-
<u>P. onca</u>	-	-	1 (1)	-	-	-	-	-	-	-

Total exports of spotted cat skins from El Salvador (no. of skins)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
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CITES data										
Total exports	-	-	1	-	-	1	-	-	-	-
Direct exports			1			1				

Customs data (imports)										
F.R. Germany	809	-	-	-	-	-	-	-	-	-

FRENCH GUIANA

Species

Lutrinae Lutra longicaudis (enudris)

Widely distributed. Extrapolation from research in Guyana and Suriname suggests that population levels probably remain stable and healthy (Melquist, 1984).

Pteronura brasiliensis (brasiliensis)

Very little information available. Presumed to have been widely distributed in the interior although concentrated at fewer sites than Lutra longicaudis (Melquist, 1984).

Felidae Felis pardalis (maripensis)

Very little information available. Included by implication in a general description of distribution by Cabrera (1957). Remains quite common in interior areas (Reichart pers. comm. cited in Melquist, 1984).

Felis tigrina (tigrina)

Cabrera (1957) reported its occurrence. Reichart (pers. comm. cited in Melquist, 1984) described it as rarer than the other spotted cats in Suriname and reported that this was probably also true for French Guiana.

Felis wiedii (vigens)

Cabrera (1957) implied that the species occurred in French Guiana, however no definite statement was made. Reichart (pers. comm. cited in Melquist, 1984) stated that the species was probably fairly common away from the coastal belt, as in Suriname.

Panthera onca (onca)

Occurrence confirmed by Cabrera (1957). Probably remains quite common (Reichart pers. comm. cited in Melquist, 1984).

Legislation

French Guiana is an Overseas Department of France and subject to French law. The country is covered by France's ratification of the Convention (which came into effect on 9 August 1978). However CITES permit issuance and administration for France and its Overseas Departments is based in Paris, therefore the authorities in French Guiana have no direct responsibility for CITES implementation and their efforts to implement the Convention are frustrated by poor communications with Paris. Trade between France and its Departments is treated as domestic rather than international, so CITES does not apply to wildlife shipments between French Guiana and France (Fuller and Swift, 1985).

Within French Guiana, hunting and trade were controlled under Arrêté Prefectoral No. 172 1D/2B of 31 January, 1975, which included a list of species that could not be purchased, sold, imported or exported. The hunting of listed species, including Pteronura brasiliensis, 'other otters', Felis pardalis, F. tigrina and Panthera onca, was prohibited, unless under licence for scientific purposes or for the control of specimens injurious to agriculture. Otherwise commercial and sport hunting required special permission from the prefectoral authority, which was given the authority to impose limits as to species or geographical areas (Fuller and Swift, 1985). further Arrêté, of 15 May 1986, issued in Paris, banned the hunting, transport, trade and export of both native otter species and of all three

native small spotted cat species and banned the capture, trade and export of Panthera onca.

Harvest and international trade

No evidence is known of large scale commercial harvest of cats and otters in French Guiana. One report suggested that throughout the Guianas there was a lack of commercial interest in the spotted cats (Melquist, 1984). However French Guiana has apparently played an important role in the transit of skins, especially into France and from there into the rest of Europe. McGrath (1986) reported that French Guiana had acted as a major outlet for skins obtained in the Brazilian Amazon during the 1970s. As trade from Cayenne to the French mainland was considered internal, such trade does not appear in Customs records and therefore it is not possible to estimate the number of skins involved.

Recent visitors to French Guiana have found a flourishing trade in wildlife products within the country. Cat and otter products were commonly displayed in shops; these were mainly bought by French tourists. Furthermore a number of restaurants advertised menus including meals containing meat of wildlife species, such as Felis pardalis and Panthera onca (Villalba-Macias, 1986).

No trade of cat or otter skins from French Guiana was reported by CITES Parties between 1976 and 1985. Neither were any imports from this source recorded in any of the Customs figures which were analysed. However exports to France are treated as internal French trade which is not included in either French Customs reports or its annual reports to CITES.

GUATEMALA

Species

Lutrinae
Lutra longicaudis
(annectens)

Hall (1981) included all of Guatemala within the range of this species. Saunders et al. (1950) reported that it occurred in most streams in forest areas up to about 1500m elevation on both Caribbean and Pacific slopes and that it was probably most abundant in the foothills and the upper edges of the coastal lowlands.

Felidae
Felis pardalis
(pardalis)

Hall (1981) included the whole of Guatemala within the range of the species. Saunders et al. (1950) reported its occurrence wherever suitable forest areas existed. No information on population size or status is known.

Felis wiedii
(salvinia,
yucatanica)

Hall (1981) indicated that the Appendix I subspecies salvinia occurred in the southern areas of the country and yucatanica occurred in the north. Saunders et al. (1950) reported that the species had always been very rare and that it occurred in the larger damp forests throughout the country.

Panthera onca
(centralis, goldmani)

Lowlands of both coasts, Peten and the mountains of the Alta Vera Paz and Quiché (Saunders et al., 1950). Thornback and Jenkins (1982) reported that towards the north of the species range the savannas of north-western Guatemala were among the few areas where the species had survived.

Legislation

CITES came into force in Guatemala on 5 February 1980. The Ley de Caza, Ley No. 8-70 of 14 April 1970 prohibited all hunting and export of designated species (including all of the native cats and the otter). The references in this legislation to hunting of species not designated by name in the attached list are confusing and therefore the INAFOR (Instituto Nacional Forestal) interprets the law to allow hunting of all species except those listed in the Ley de Caza and in CITES Appendix I, and species that it considers endangered (Fuller and Swift, 1985). The CITES Management Authority of Guatemala has informed the CITES Secretariat that, from 24 March 1986, all activities with regard to hunting, capture, local trade, export and re-export of wild fauna were suspended (CITES Notification No. 386, 7 May 1986).

Harvest and international trade

Saunders et al. (1950) reported that Panthera onca was one of the most sought after game animals in Guatemala. At that time the best areas for hunting were the Pacific lowland forests and Peten. Hunting was usually carried out by pursuit with hounds during the day or from boats at night. The value of the skin of Felis pardalis made it a popular game animal; hunting methods were similar to those used for Jaguar. Felis wiedii was reported to have no value as a game animal, owing to its rarity, but it was hunted when encountered and the otter species, although killed on sight, was described as unsuitable for eating, of no value as game and in need of protection (Saunders et al., 1950). Almost no trade from this country is recorded in the available data.

CITES data - Guatemala

Guatemala submitted annual reports to CITES for each of the years from 1981 to 1984. The table shows, for each taxon and for each year, the minimum number of skins in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Lutrinae</u>										
<u>L. longicaudis</u>	-	-	-	-	-	-	-	-	-	-
<u>Felidae</u>										
<u>F. pardalis</u>	-	-	-	-	1 (1)	-	-	-	1 (1)	-
<u>F. wiedii</u>	-	-	-	-	-	-	-	-	-	-
<u>P. onca</u>	-	-	-	-	-	-	1 (1)	-	1 (1)	-

Total exports of spotted cat skins from Guatemala (no. of skins)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
CITES data										
Total exports	-	-	-	-	1	-	1	-	2	-
Direct exports					1		1		2	-

No imports from Guatemala were included in the Customs data

GUYANA

Species

Lutrinae

Lutra longicaudis (enudris)

Probably widespread and quite common (Melquist, 1984), including the canal systems of the coastal belt (Laidler pers. comm. cited in Melquist, 1984).

Pteronura brasiliensis (brasiliensis)

Investigations in 1979 found the species to have been fairly widespread, including coastal areas. The only area where populations were known to have been depleted was Rupununi Savanna near the Brazilian border (Laidler, 1979).

Felidae

Felis pardalis (maripensis)

Interviews conducted by Melquist (1984) suggested that the species was probably widespread and fairly common and Reichart (pers. comm. cited in Melquist, 1984) reported that the species was quite common in Suriname and that this was probably also true for Guyana.

Felis tigrina (tigrina)

Reported to occur by Cabrera (1957). Reichart (pers. comm. cited in Melquist, 1984) suggested that this was probably the least common of the small spotted cats throughout the Guianas.

Felis wiedii (vigens)

Cabrera (1957) included Guyana in the range of this species by implication only, stating its range as north-east South America. However Melquist (1984) reported that the species was thought to be widespread in Guyana.

Panthera onca (onca)

Reportedly widespread away from coastal areas and probably fairly common (Melquist, 1984).

Legislation

CITES entered into force in Guyana on 25 August 1977. Until 1987 there were few restrictions on wildlife trade. Bobb (pers. comm. cited in Melquist, 1984) of the CITES Management Authority in Guyana stated that there was no specific law protecting mammals, however a list of strictly protected species included Pteronura brasiliensis but not Lutra longicaudis or any of the cat species. It was not clear, from this account, which legislation included this list of fully protected species. The Fisheries (Aquatic Wildlife Control) Regulations issued in 1967 banned capture and killing of species listed in an attached schedule, including "Water Dogs"; it is possible that this referred to the Giant Otter.

In 1983 the issuance of wildlife export permits was suspended for six months while the laws relating to wildlife were reviewed. Exports resumed in December 1983 but the issuance of export permits was again halted on 15 December 1986. Since 28 February 1987, all commercial exports of wildlife have been banned for an indefinite period (McAndrew in litt. to O. Menghi, 1986).

Harvest and international trade

Melquist (1984) reported that there seemed to have been little commercial interest in the cats and otters in Guyana; no skins were seen on sale in Georgetown during a visit in 1982/1983. One report stated that Panthera onca was occasionally killed by hunters and cattle ranchers (Singh pers. comm. cited in Melquist, 1984). The only report of commercial skin trade involving any of the native cat or otter species was of hunting of Pteronura brasiliensis in the Rupununi Savanna in southern Guyana on the Brazilian border. This hunting reportedly supplied the Brazilian skin trade (Laidler, 1979).

Almost no imports from Guyana were reported in Customs and CITES data.

CITES data - Guyana

Guyana has not submitted any annual reports to CITES despite having been a Party nation since 1977. The table shows, for each taxon and for each year, the minimum number of skins in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Lutrinae</u>										
<u>L. longicaudis</u>	-	-	-	-	-	-	-	-	-	-
<u>P. brasiliensis</u>	-	-	-	-	-	-	-	-	-	-
<u>Felidae</u>										
<u>F. pardalis</u>	-	-	-	-	-	1 (1)	-	1 (1)	-	-
<u>F. tigrina</u>	-	-	-	-	-	-	-	-	-	-
<u>F. wiedii</u>	-	-	-	-	-	-	-	-	-	-
<u>P. onca</u>	-	1 (1)	-	-	1 (1)	-	-	1 (1)	1 (1)	-

Total exports of spotted cat skins from Guyana (no. of skins)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
CITES data										
Total exports	-	1	-	-	1	1	-	1	-	-
Direct exports		1			1	1		1		

No imports from Guyana were included in the Customs data

HONDURAS

Species

Lutrinae

Lutra longicaudis (annectens)

The whole of Honduras was included within the distribution indicated by Hall (1981). Aguilar (1978) also included the native Mustelids in a list of threatened or endangered species.

Felidae

Felis pardalis (pardalis)

Hall (1981) included all of Honduras within the range of this species. All Felidae were considered considered threatened or endangered (Aguilar, 1978).

Felis wiedii (nicaraguae)

No further information than that recorded for Felis pardalis.

Panthera onca (centralis)

No further information than that recorded for Felis pardalis.

Legislation

Although Honduras set up legislation to implement CITES in 1978, it did not deposit an instrument of ratification with the Swiss Government until 1985. The Convention came into force on 13 June 1985. Decreto Ley No. 771 of 1979 was the original law ratifying CITES and it was under this legislation that all commercial trade and export of wildlife was banned in 1979, with the exception of certain species for which quotas were established. There are no quotas for the native cats and otter. Honduras lacks a general hunting law (Fuller and Swift, 1985). The CITES Secretariat informed the Parties to the Convention that Resolution No. 209-82 of 26 April 1982 banned all trade and export of products of listed species, including the native cats and the otter species (CITES Notification No. 415, 28 November 1986). Resolution No. 209-82 was cancelled in 1986 by Resolution No. 208-86 which extended the protection afforded to the native cats and otter by prohibiting all hunting, capture, and internal and external trade in live specimens, products, subproducts and other derivatives (CITES Notification No. 425, 13 March 1987).

Harvest and international trade

No information is available on exploitation within the country. However CITES data indicate considerable exports of F. pardalis, F. wiedii and L. longicaudis skins which apparently declined after 1980. Customs data for F.R. Germany also show that large imports of cat skins from this country took place up to 1978.

CITES data - Honduras

Honduras has not submitted any annual reports to CITES. The table shows, for each taxon and for each year, the minimum number of skins in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Lutrinae</u>										
<u>L. longicaudis</u>	-	-	-	639 (639)	-	-	-	-	-	-
<u>Felidae</u>										
<u>F. pardalis</u>	25 (25)	17 (17)	699 (117)	261 (261)	15 (1)	3 (3)	2 (2)	2 (2)	2 (2)	-
<u>F. wiedii</u>	38 (38)	17 (17)	2636 (0)	-	1566 (0)	7 (7)	-	-	-	-
<u>P. onca</u>	-	-	-	-	-	1 (1)	-	-	1 (1)	-

Total exports of spotted cat skins from Honduras (no. of skins)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>CITES data</u>										
Total exports	63	34	3335	261	1581	11	2	2	3	-
Direct exports	63	34	117	261	1	11	2	2	3	
<u>Customs data (imports)</u>										
F.R. Germany	2222	899	654	-	-	-	-	-	-	-

MEXICO

Species

Lutrinae

Lutra longicaudis (annectens)

Distributed throughout southern areas of the country, extending north to Sonora along the east coast and the north of Veracruz on the western coast (Hall, 1981). No status information available.

Felidae

Felis pardalis (albescens?, nelsoni, pardalis, sonoriensis)

Hall (1981) indicated that the species was found throughout the Yucatan Peninsula and in the states of Chiapas and Oaxaca in the south; from there its distribution extended to the north along both coasts to the border with the USA, although it did not occur in western Sonora or in the central districts of the country. Thornback and Jenkins (1982) reported that no recent status information was available, but a recent report described the species as endangered in Mexico (Ceballos and Navarro, in prep.).

Felis wiedii (glaucula, oaxacensis, yucatanica)

Distribution reportedly similar to Felis pardalis but only extending north as far as the US border on the east coast (Hall, 1981). Leopold (1959) reported that it was known from very few specimens but earlier Goldman (1943) suggested that the species may have been less rare than the lack of records may suggest. Guggisberg (1975) described the species as rare in Mexico.

Panthera onca (centralis?, goldmani, hernandesii, veraecrucis, arizonensis)

Distribution similar to that of Felis pardalis (Hall, 1981). Although generally uncommon, fair numbers were reported to survive in eastern Campeche, Selva Lacandone, eastern Chiapas and eastern Oaxaca (Anon., 1980c).

Legislation

Mexico is not a Party to CITES. Wildlife imports and exports are strictly controlled by an order titled 'Bases de Control y Regulacion de Exportaciones e Importaciones de Fauna Silvestre y sus Productos Derivados' of 20 September 1982. All commercial export of live wildlife and products and the import of live wildlife was prohibited. Non-commercial export of specimens collected for scientific purposes, of wildlife and products from approved breeding facilities and of live animals for exchange with zoos or similar institutions may be allowed under permit. Furthermore the export of sport trophies requires only the proof of a valid hunting permit. Hunting is controlled by the Ley Federal de Caza of 3 December 1951, which provides protected zones, hours and methods of hunting, together with hunting calendars and possession limits for game species (Fuller and Swift, 1985). Under this legislation all commercial hunting was banned. The hunting calendar for the 1980-81 season included all of the native cats and the otter in a list of endangered species, the hunting of which was totally prohibited for any purpose (Anon., 1981). Jackson (in litt., 1987) reported that a total of 35 hunting permits had been issued in 1985/86 for Jaguars identified as livestock predators, but that the issuance of such permits had been stopped in 1987.

Harvest and international trade

Ramos (1986) indicated that hunting of spotted cats continued in Mexico. The country also acted as a major transshipment point for trade from Central America and other regions. Spotted cat skins, including those of Jaguar and Ocelot were offered to McVay (1986). This continuing internal trade and the country's prominence as an entrepot in the region were reportedly sustained by the lucrative market across the border in the USA and were facilitated by the problems of trade control at this border.

Considerable numbers of spotted cat skins from this source are recorded in CITES and Customs data for some years; this trade seems to have decreased to insignificant levels since 1980, but the extent of previously mentioned illegal trade into the USA is impossible to estimate.

CITES data - Mexico

Mexico is not a CITES Party. The table shows, for each taxon and for each year, the minimum number of skins in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Lutrinae										
Lutrinae spp.	-	-	162 (162)	-	-	-	-	-	-	-
<u>L. longicaudis</u>	-	-	-	308 (0)	-	-	-	-	-	-
Felidae										
<u>F. pardalis</u>	418 (418)	-	1195 (54)	-	2 (2)	15 (3)	14 (0)	6 (4)	3 (2)	-
<u>F. wiedii</u>	1384 (0)	-	261 (261)	-	3 (3)	2 (2)	2 (2)	6 (4)	9 (9)	-
<u>P. onca</u>	-	-	-	-	2 (2)	2 (2)	-	3 (3)	9 (9)	-

Total exports of spotted cat skins from Mexico (no. of skins)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
CITES data										
Total exports	1802	-	1456	-	5	17	16	15	21	-
Direct exports	418		315		5	5	2	11	20	
Customs data (imports)										
F.R. Germany	9017	12125	5819	698	1204	-	-	-	-	-
UK	-	-	166	-	-	-	-	-	-	-

NICARAGUA

Species

Lutrinae

Lutra longicaudis
(annectens)

Recorded by Hall (1981) as occurring throughout the country. Listed as endangered by Salas (1978).

Felidae

Felis pardalis
(mearnsi)

Hall (1981) included all of Nicaragua within the range of the Appendix I subspecies mearnsi. Salas (1978) described the species as endangered in this country.

Felis tigrina ?
(oncilla ?)

Included in a list of the endangered mammals of Nicaragua (Salas, 1978), but not recorded by Hall (1981) as occurring in the country.

Felis wiedii
(nicaraguae)

Occurrence confirmed by Hall (1981); recorded as endangered by Salas (1978).

Panthera onca
(centralis)

Recorded by Hall (1981) as occurring throughout the country. Not included by Salas (1978) in list of endangered and threatened native species.

Legislation

CITES came into force in Nicaragua on 4 November 1977. The Ley de Caza, No. 206 of 1956 provides regulation of domestic hunting. This law established permitted hunting methods and zones, required the issuance of hunting licences and set penalties for infractions. Hunting may generally be permitted for sport, subsistence or scientific purposes. Provisions controlling domestic commerce in wildlife included in Ley No. 206 were superseded in 1977 by Decreto No. 625 (of 18 March). This law prohibited commercial hunting and export of all wildlife, with the exception of some domestic trade in designated species, including caimans, iguanas and parrots. All of the native cats and the otter were included in a list of totally protected species in Acuerdo No. 2 of 1983, the latest legislation implementing the Ley de Caza (Fuller and Swift, 1985). Although all commercial hunting and trade in these species has been banned since 1977, it is uncertain when they were first totally protected from hunting by the Ley de Caza.

Harvest and international trade

The spotted cats were subject to intense hunting for their skins during past decades (Barquero, 1976). Ryan (1977, cited in Thornback and Jenkins, 1982) stated that, in 1977, there remained a flourishing trade in live Felis pardalis cubs for the pet trade; such animals could reportedly be sold in the USA for US\$ 800 (Domalain, 1977).

Very few skins from this source were included in CITES data. The Customs data indicate large numbers of small cat skins in trade in 1976, 1977 and 1979 from Nicaragua. CITES data do not reflect any large scale exports of live animals from this source, as suggested above, for the pet trade.

CITES data - Nicaragua

Nicaragua submitted annual reports to CITES for each of the years from 1979 to 1984. The table shows, for each taxon and for each year, the minimum number of skins in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Lutrinae</u>										
<u>L. longicaudis</u>	-	-	-	-	-	-	-	-	-	-
<u>Felidae</u>										
<u>F. pardalis</u>	-	-	-	-	-	2 (2)	7 (7)	-	1 (1)	-
<u>F. wiedii</u>	-	-	-	-	-	1 (1)	-	-	-	-
<u>P. onca</u>	-	-	-	-	-	1 (1)	-	-	-	-

Total exports of spotted cat skins from Nicaragua (no. of skins)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>CITES data</u>										
Total exports	-	-	-	-	-	4	7	-	1	-
Direct exports	-	-	-	-	-	4	7	-	1	-
<u>Customs data (imports)</u>										
F.R. Germany	5579	687	-	889	-	-	-	-	-	-

PANAMA

Species

Lutrinae

Lutra longicaudis (annectens)

The population size was reportedly declining and therefore the species was included in a list of threatened mammals of Panama (Vallester, 1978).

Felidae

Felis pardalis (mearnsi)

Hall (1981) included all of Panama within the range of this species which was described as endangered in the country by Vallester (1978).

Felis tigrina (oncilla?)

Very little information is available describing the distribution or status of this species in Panama. Hall (1981) included the country in the distribution of the Appendix I subspecies oncilla, but noted that its presence was unverified. Vallester (1978) did not include it in a list of the threatened wildlife species of Panama. However Thornback and Jenkins (1982) suggested that this may have been caused by confusion with Felis wiedii. Rodriguez (in litt. to O. Menghi, 1985) stated that there was no definite record of the occurrence of F. tigrina in Panama, but that it probably occurred in the Cordillera. Described as very rare by Koford (1975).

Felis wiedii (pirrensis)

All of the country was included in the range of this species (Hall, 1981). Reported as rare in 1920 (Goldman, 1920) and more recently it was described as endangered (Vallester, 1978).

Panthera onca (centralis)

Reported to occur (Hall, 1981); described as endangered (Vallester, 1978).

Legislation

Panama became a Party to CITES on 15 November 1978. Ratification was enacted by Ley No. 14 of 1977. Decreto No. 23 of 30 January 1967 prohibited the use or sale of meat from wild animals. The Direccion Nacional de Recursos Naturales Renovables (RENARE) reportedly interpreted this measure to prohibit sport hunting and to allow hunting for subsistence purposes. This decree included a list of fully protected species, which apparently did not include the native cats and otters. Resolucion No. 002 of 24 January 1980 provided protection from hunting, trade and export for 82 species, including the otter species and all of the native cats, with the exception of Felis tigrina (Fuller and Swift, 1985).

Harvest and international trade

Melquist (1984) was informed that the enforcement of domestic wildlife laws was poor and that the Colon Free Zone near Panama City was a renowned centre for the illegal skin trade, however no clear evidence of continuing commercial illegal skin trade was found. Smythe (pers. comm. cited in Melquist, 1984) reported that Lutra longicaudis populations had been reduced, although this was not thought to have been caused by the skin trade; the use of otter eyes by native Indians was the only other possible threat mentioned.

The majority of exports reported from this source in CITES data were skins of F. pardalis, F. tigrina, F. wiedii and L. longicaudis. Both CITES and Customs data indicate very little trade from this source after a peak export in 1980.

CITES data - Panama

Panama submitted annual reports to CITES for 1979, 1980 and 1981. The table shows, for each taxon and for each year, the minimum number of skins in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Lutrinae										
Lutrinae spp.	-	101 (101)	389 (389)	-	-	-	-	-	-	-
<u>L. longicaudis</u>	-	-	-	448 (448)	276 (0)	-	-	-	-	-
Felidae										
Felidae spp.	-	64 (64)	-	-	-	-	-	-	-	-
<u>F. pardalis</u>	-	178 (178)	-	213 (30)	2765 (2765)	-	-	3 (1)	-	-
<u>F. tigrina</u>	-	-	-	399 (399)	145 (145)	-	-	-	-	-
<u>F. wiedii</u>	-	131 (131)	93 (93)	120 (120)	1171 (1171)	20 (20)	-	-	-	-
<u>P. onca</u>	-	-	-	-	2 (2)	-	-	-	-	-

Total exports of spotted cat skins from Panama (no. of skins)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
CITES data										
Total exports	-	373	93	732	4083	20	-	3	-	-
Direct exports		373	93	549	4083	20		1		

Customs data (imports)

F.R. Germany	718	1349	1379	-	1456	-	-	-	-	-
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PARAGUAY

Species

Lutrinae

Lutra longicaudis (longicaudis)

Reported to occur by Cabrera (1957). Thornback and Jenkins (1982) reported that no information on national distribution, population size or status had been found. Melquist (1984) reported that the species was found primarily in the smaller streams of eastern Paraguay and in the marsh areas and tributaries of the Pilcomayo and Paraguay Rivers. Healthy populations were also reported to occur in the Departments of Concepcion and Amambay in the north-east and Neembucu, Misiones and Itapua in the south. Melquist considered that the population was probably stable.

Pteronura brasiliensis (paranensis)

Little information available on the distribution of this species in Paraguay. Various reports summarised by Melquist (1984) suggested that it was restricted to remnant populations along the tributaries of the Paraguay and Parana Rivers. Population size is unknown but probably very small (Schaller, 1980 cited in Thornback and Jenkins, 1982).

Felidae

Felis colocolo (braccata)

Reported to occur by Cunha Vieira (1955); population size and status unknown.

Felis geoffroyi (paraguae)

Found in the southern regions of the country (Ximenez, 1975). Population size and status unknown.

Felis pardalis (mitis)

Cabrera (1957) reported the occurrence of this species in Paraguay and more recently Wetzel and Lovett (1974) confirmed its presence in the Chaco region of the country. Field scientists noted a rapid reduction in numbers in the Chaco region in the 1970s owing to agricultural expansion and an increase in the number of roads in the region, allowing easier access by hunters and settlers (Wetzel, 1980 cited in Thornback and Jenkins, 1982).

Felis tigrina (guttula)

Reported to occur (Cabrera, 1957), however no detailed distribution information is known although Melquist (1984) thought that the species was unlikely to occur in the central Pantanal, bordering the Paraguay River. The size and status of the population is also unknown.

Felis wiedii (bolivae?, wiedii)

Cabrera (1957) described the two subspecies as occurring in the north and east of the country respectively. No more detailed distribution information is known, however Melquist (1984) thought it unlikely that the species would occur in the central Pantanal, bordering the Paraguay River. Population size and status unknown.

Panthera onca
(palustris)

Reported to occur by Cabrera (1957). A report submitted to Ellis (1979) from the Paraguayan authorities stated that in the 1930s the species was numerous in all areas of the country, even near rural settlements or small cities in the interior. By the late 1970s most of the Jaguars remaining in the country were in the northern Chaco, a few remaining in east central Paraguay. The report estimated that the population was probably in the range of 1000 to 10 000 animals and suggested that the population remained under great threat.

Legislation

Paraguay has been a CITES Party since 13 February 1977. A ban on all hunting, trade, import and export of indigenous species of mammals, birds, reptiles and amphibians was introduced by Presidential Decree No. 18.796 of 1975. Enforcement of this ban was reportedly erratic for a number of years owing to confusion, mainly over the effect of the 1977 legislation which implemented CITES. However Paraguay officially reaffirmed the ban in 1981 and no export permits have been issued since July 1982. The only exception in the decree allows the hunting of species designated by regulation as harmful to agriculture, although no species have been so designated. Limited scientific and educational collection may be permitted under special decree. Some dispute remains over the question of whether Paraguay allows import and subsequent re-export of wildlife. The CITES Secretariat informed the Parties in Notification No. 225 (13 October 1982) that Paraguay may allow the import of raw wildlife products for manufacture and re-export, however the Paraguayan Management Authority has been quoted as stating that no such trade is allowed (Fuller and Swift, 1985).

Harvest and international trade

Hunting and commercial trade were extensive until the late 1970s. Koford (1974) reported that, in the early 1970s, Paraguay was by far the major source of legally acquired cat skins. Moreno (pers. comm. cited in Melquist, 1984) stated that, at the peak of the harvest, as many as 3000 professional cat hunters operated in the country. Torres (1979, cited in Ellis, 1979) stated that commercial skin hunting and to a lesser extent sport hunting were the main causes of the decline of the Jaguar in Paraguay, however the growth of the human population and resulting habitat destruction were also quoted as important factors in its decline. Melquist (1984) reported that, since the introduction of the hunting ban in 1975, the cat and other populations were likely to have increased somewhat. However he stated that evidence indicated that the skin trade and trophy hunting continued as covert operations. He found evidence of substantial trade in cat and other skins in 1983; much of which was reported to originate in the Brazilian Pantanal. Overall, although there was little more open evidence of large scale commercial hunting and trade than found in other countries, the indication was that trade in cat and other skins had continued into the 1980s in Paraguay. Beconi (in litt., 1986), a Paraguayan skin trader, denied that commercial skin trade continued, and stated that many of the hunters who had been economically dependent on the trade were now involved in the cultivation of marijuana and cocaine, which offered greater financial incentive and less risk. However the existence of a thriving trade is borne out by official statistics.

Paraguay was identified as by far the largest source of small spotted cat skins by both CITES and Customs data. Substantial exports of other skins were

also reported. Over the ten year period covered by available statistics, CITES data indicated exports of over one million small spotted cat skins from this source and imports from Paraguay to European countries in their Customs data totalled over one and a half million skins. This trade has continued despite the export ban imposed in 1975; even considering the problems with implementation in the late 1970s it is alarming that substantial direct imports from Paraguay were reported after 1981 when the issuance of export permits was supposedly finally halted. The implications of such quantities of skins are also alarming; CITES data for 1983 indicate exports of almost a quarter of a million cat skins from Paraguay. It seems doubtful that the total cat population of Paraguay could be this large, therefore such figures imply significant re-exports from other countries in the region. The sharp decrease in reported trade in both CITES and Customs data for 1985 may indicate that trade controls have at last taken effect, but data for further years are required before this can be confirmed.

CITES data - Paraguay

Paraguay has not submitted any CITES annual reports. The table shows, for each taxon and for each year, the minimum number of skins in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Lutrinae</u>										
<u>Lutrinae spp.</u>	-	8349 (8349)	17273 (17273)	1626 (20)	-	-	-	-	-	-
<u>L. longicaudis</u>	-	-	-	20416 (20416)	36795 (32070)	4872 (0)	5063 (0)	527 (0)	157 (0)	-
<u>P. brasiliensis</u>	-	-	-	-	-	1000 (1000)	-	-	-	-
<u>Felidae</u>										
<u>Felidae spp.</u>	-	1000 (1000)	123807 (123807)	-	-	-	-	-	-	-
<u>F. colocolo</u>	-	-	-	2728 (0)	8201 (8201)	433 (433)	-	-	-	-
<u>F. geoffroyi</u>	-	2100 (2100)	14532 (14532)	54095 (54095)	58767 (58667)	81871 (72725)	21137 (8500)	84921 (3000)	4500+363 kg (363kg)	-
<u>F. pardalis</u>	693 (0)	3255 (3241)	11845 (11845)	9081 (9081)	25390 (25390)	17069 (9414)	9370 (3199)	68928 (2500)	2741 (2600)	315 (0)
<u>F. tigrina</u>	4670 (0)	7229 (0)	20000 (20000)	23146 (23146)	32675 (31894)	35068 (34986)	68163 (51560)	84492 (28375)	19167+606kg (606kg)	7 (0)
<u>F. wiedii</u>	1168 (0)	4873 (4873)	9927 (9927)	7560 (7527)	16693 (14902)	17488 (8534)	13071 (7200)	8558 (500)	4068 (0)	138 (0)
<u>P. onca</u>	5 (0)	-	-	-	587 (587)	10 (0)	-	-	-	-

Total exports of spotted cat skins from Paraguay (no. of skins except where kg indicated)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
CITES data										
Total exports	6536	18457	180111	96610	142313	151939	111741	246899	30476+969kg	460
Direct exports	0	11214	180111	93849	139641	126092	70459	34375	2600+969kg	0
Customs data (imports)										
Belgium	-	-	-	-	-	-	-	6616	-	-
F.R. Germany	28839	103693	180677	230105	175012	127098	95402	161150	52749	-
France	-	-	-	-	-	-	48881	123951	18426	-
Italy	-	-	-	6400 kg	3000 kg	8500 kg	11900 kg	400 kg	-	100 kg
Spain	?	?	?	?	323 kg	1046 kg	2934 kg	192 kg	406 kg	-
UK	-	1836	-	1450	-	-	-	-	-	-

PERU

Species

Lutrinae

Lutra felina

Confined to rocky stretches of the coast from the border with Chile, to about 12°S (Grimwood, 1969) and perhaps as far north as 6°S (Brack-Egg, 1978). A report in 1967 estimated the total population in Peruvian waters to have been 200-300 (Thornback and Jenkins, 1982). Brack-Egg (1978) indicated that it had become very scarce along the coast, the most important remaining areas having been the Paracas Peninsula and Morro de Sama.

Lutra longicaudis
(annectens, enudris)

Described as occurring throughout the low and high selva zone of the Amazon region, except in the lowest parts of the low selva. May occur as high as 3000 m. In the late 1960s the species was thought to have been severely depleted in most areas by over-exploitation (Grimwood, 1969). More recently Brack-Egg (1978) reported that the species remained reasonably numerous in areas of the Amazon basin away from centres of human population. However, it was less abundant on the east slope of the Andes and very rare in the northern parts of the country.

Pteronura brasiliensis
(brasiliensis)

Confined to the low selva zone of the Amazon region, along the lower basins of the major Amazon tributaries. Reported to have disappeared from most of its former range, surviving in small isolated relict populations in some areas (Grimwood, 1969). Population size unknown but the species was generally considered endangered (Brack-Egg, 1978).

Felidae

Felis colocolo
(garleppi, thomasi)

Fairly widespread; found in Andean valleys, in the ceja de selva zone of the Amazon region and in the coastal zone to the west of the Andes. Reported to have been largely unaffected by commercial hunting and to have survived in adequate numbers in all areas (Grimwood, 1969). No recent information available.

Felis jacobita

Reported by Cabrera (1957) to have been found throughout the high mountainous region of southern Peru, however Grimwood (1969) could find little indication of its local distribution or status in that area, possibly because of confusion with Felis colocolo. Evidence suggested that, although no more threatened by human activities than F. colocolo, this species was rarer and it had a very limited range in Peru.

Felis pardalis
(aequatorialis,
pusaea)

Found throughout the low selva zone of the Amazon region, although not extending far into the high selva zone, and in the northern parts of the coastal region. Relentlessly persecuted, but not entirely eradicated from all areas of settlement and reported

to have remained quite plentiful in some areas (Grimwood, 1969). Described as common in the Cocha Cashu area of the Manu National Park (Terborgh et al., 1984).

Felis tigrina
(pardinoides)

Grimwood (1969) found no definite record of the occurrence of this species in Peru, but expected it to occur in the Amazon region.

Felis wiedii
(amazonica ?,
pirrensis)

Little known, but presumed to have occurred in the northern Andean region and the low selva zone of the Amazon region. The status of this species was reported to have been largely unknown, however it was generally regarded as uncommon (Grimwood, 1969).

Panthera onca
(peruvianus)

Found throughout the low selva zone of the Amazon region, extending up to about 1000m altitude in the high selva zone and to the west of the Andes in the Department of Tumbes. Eradicated from all areas near settlement and reported to have been rare in many parts of its former range (Grimwood, 1969).

Legislation

CITES entered into force in Peru on 25 September 1975. In 1970 Ministerial Resolution No. 5056-70-AG introduced an indefinite closed season for the hunting of Panthera onca and Pteronura brasiliensis (Felis jacobita was apparently added at a later date). This regulation also banned the trade and export of the skins of these species. It regulation was followed in 1973 by Supreme Decree No. 934-73-AG (Veda de Caza) which declared an indefinite prohibition on all hunting of and trade in mammals, birds, reptiles and amphibians from the Selva region. The exceptions to this were hunting for scientific purposes, which could be authorised by Ministerial Resolution, and the hunting for food and subsequent trade in the by-products of certain species, not including the cats or otters, by local inhabitants of the region. National protection was afforded to the cats and otters by Decreto Supremo No. 158-77-AG which approved the regulations developed under the Ley Forestal y de Fauna Silvestre (Decreto Ley No. 21147) of 1975. A list of protected species was developed under this legislation which included species in four categories: in danger of extinction; vulnerable; rare; and intermediate but requiring protection. All of the native otter species were included in the first category, Felis colocolo, Felis pardalis and Panthera onca were listed as vulnerable, Felis jacobita as rare and Felis wiedii as intermediate.

The decree prohibited the hunting of species classified as in danger of extinction for an indefinite period but hunting of the other species for commercial, sport, scientific or subsistence purposes could be authorised under licence. The decree prohibits the commercial export of wildlife products in their natural state (Fuller and Swift, 1985). Therefore all of the otters are totally protected throughout the country, however it seems that the cats may be hunted outside the Selva region under licence.

Harvest and international trade

According to the Verband der Deutschen Rauchwaren und Pelzwirtschaft e.V., Peru was the major exporter of cat skins from Latin America during much of the 1960s (Langenberger, in litt., 1986). Table 6 details the exports of cat and

otter skins from Iquitos in the Amazon region, between 1946 and 1973, when commercial hunting was banned in the region. A total of 427 259 skins were reportedly exported, mainly of Felis pardalis and Lutra longicaudis, but also of Felis wiedii, Panthera onca and Pteronura brasiliensis.

Otters

Grimwood (1969) reported that Lutra felina was persecuted because of damage it was alleged to do to prawn stocks. Although the species was commonly a target of casual hunting, no substantial skin trade was described. By comparison, both Lutra longicaudis and Pteronura brasiliensis were hunted intensively for the skin trade. The prices paid by local dealers for skins of these species in 1966 was reported to have been 450 soles (at that time about £6) and 1700 soles (£23) a skin respectively. Grimwood inferred from the export data that L. longicaudis was being rapidly extirpated, the numbers of skins in trade only being sustained because of the expansion of settlement in the Amazon region. The decline in exports of P. brasiliensis well before it was protected by legislation, and despite soaring skin prices, was interpreted as an indication of dwindling numbers left in the wild. In 1982 Melquist (1984) found evidence of some continuing commercial trade. One dealer stated that he could supply 200-300 L. longicaudis skins within three days for US\$ 14 a skin, however P. brasiliensis skins were difficult to obtain. The CITES data show substantial otter skin trade up to 1980.

Spotted cats

In the 1960s the skins of Felis colocolo and Felis jacobita had little or no value in trade (Grimwood, 1969). Felis pardalis was relentlessly hunted for its pelt, for which dealers in Iquitos paid around 700 soles (£9) a skin. The export figures (Table 6) show that this species was exported in greater numbers than any of the other native spotted cats or otters. Grimwood (1969) thought that it would be impossible for the species to withstand indefinitely a drain on its population of the size witnessed in the 1960s. Skins of Felis wiedii reportedly had no commercial value until 1961. After that year the number exported began to increase rapidly, although by 1966 the price paid by local dealers for a skin was only 80 soles (£1). Export figures were not provided by Pacheco (1983) for years after 1966. Grimwood suggested that F. tigrina skins may be confused with those of F. wiedii owing to their great similarity. Panthera onca had reportedly long been persecuted for its valuable skin, for which merchants would pay about 1700 soles (£23) a skin in 1966. In 1979 an official of the Peruvian Authorities told Ellis (1979) that illegal trade in P. onca skins continued, an important export route being via Colombia. Grimwood (1969) suggested that all of the spotted cats were vulnerable to over-exploitation and that hunting and trade at least required strict control. In 1982 Melquist (1984) was offered large numbers of small spotted cat skins and limited supplies of P. onca skins for US\$22 and US\$67 a skin respectively by a trader in Iquitos. Emmons (1987) pointed out that one important consequence of the large scale hunting of spotted cats in Peru was the destruction of large numbers of monkeys and other animals which were used as bait for traps.

During the 1970s a number of other countries took prominence in the supply of skins for the trade (Langenberger, in litt., 1986). Pacheco (1983), in a study of the effects of the 1973 Veda de Caza (934-73-AG), concluded that although the hunting ban had halted the drain on populations and allowed them to recover to some extent, illegal trade persisted which was difficult to control. Similarly, Melquist (1984) found that at least a small amount of

commercial trading continued in the Amazon region, ten years after the hunting ban had been introduced, and Emmons (1987) stated that discussions with Peruvian hunters revealed that Ocelots were occasionally shot, but illegal trade appeared only to continue on a small scale.

Table 6

Numbers of skins exported from Iquitos, Peru 1946-1973.

SOURCES: Pacheco (1983) and Grimwood (1969).

(Data for Felis wiedii for 1967-1973 were not reported).

Year	<u>L. longicaudis</u>	<u>P. brasiliensis</u>	<u>F. pardalis</u>	<u>F. wiedii</u>	<u>P. onca</u>
1946	596	2107	1816	0	353
1947	440	1248	1214	0	297
1948	220	751	734	0	185
1949	532	1403	2318	0	328
1950	1018	1437	2111	0	338
1951	2283	1635	2933	0	524
1952	1306	854	2373	0	219
1953	1632	918	3637	0	712
1954	3239	1213	8288	0	594
1955	3735	2169	4323	0	353
1956	4479	1766	5287	0	664
1957	3666	1066	7068	0	495
1958	4476	1278	6191	0	669
1959	4042	1114	8761	0	657
1960	6142	1002	12797	0	1207
1961	11349	293	6752	42	703
1962	6129	850	12961	663	850
1963	7762	465	10605	773	906
1964	10809	623	11310	962	673
1965	8869	223	12398	3106	1113
1966	8332	233	15060	4061	894
1967	6414	139	15370	?	839
1968	8362	149	12528	?	732
1969	8665	47	12020	?	913
1970	14554	50	18920	?	1914
1971	6712	12	11511	?	169
1972	6696	0	9039	?	0
1973	6471	0	10051	?	0
<u>TOTAL:</u>	148930	23045	228376	9607	17301

CITES and Customs data indicate that large numbers of spotted cat and otter skins continued to enter trade until 1980. The majority of the skins were of F. pardalis and F. wiedii. After 1980 very few skins were reported in the available statistics as having been imported from Peru.

CITES data - Peru

Peru submitted CITES annual reports for the years 1976 to 1980 inclusive and for 1982. The table shows, for each taxon and for each year, the minimum number of skins in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Lutrinae</u>										
<u>Lutrinae spp.</u>	-	4411 (4411)	4006 (4006)	-	-	-	-	-	-	-
<u>L. felina</u>	-	-	-	-	-	-	-	-	-	-
<u>L. longicaudis</u>	-	-	-	2314 (2314)	500 (0)	-	-	-	-	-
<u>P. brasiliensis</u>	-	-	-	-	-	-	-	-	-	-
<u>Felidae</u>										
<u>F. colocolo</u>	-	-	-	-	-	-	-	-	-	-
<u>F. jacobita</u>	-	-	-	-	-	-	-	-	-	-
<u>F. pardalis</u>	-	7233 (7233)	13034 (13034)	5581 (5581)	1884 (1884)	38 (20)	2 (2)	9 (6)	-	-
<u>F. tigrina</u>	-	-	-	-	-	-	-	-	-	-
<u>F. wiedii</u>	22 (0)	7279 (7279)	6345 (6345)	2251 (2251)	1638 (625)	-	1 (1)	-	-	-
<u>P. onca</u>	-	-	-	-	2 (2)	-	-	-	-	-

Total exports of spotted cat skins from Peru (no. of skins)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<hr/>										
CITES data										
Total exports	22	14512	19379	7832	3524	38	3	9	-	-
Direct exports	0	14512	19379	7832	2511	20	3	6		
<hr/>										
Customs data (imports)										
F.R. Germany	1275	13624	14775	6732	3867	-	-	-	-	-
<hr/>										

SURINAME

Species

Lutrinae

Lutra longicaudis (enudris)

Reported to have been identified on at least five major river systems in the country. Described as adaptable (Duplaix, 1978b). Melquist (1984) thought that the population was probably quite stable.

Pteronura brasiliensis (brasiliensis)

Described as widespread with a stable, healthy population, especially in the interior (Duplaix, 1978b).

Felidae

Felis pardalis (maripensis)

Reichart (pers. comm. cited in Melquist, 1984) reported that the species remained widely distributed and reasonably common.

Felis tigrina (tigrina)

Reichart (pers. comm. cited in Melquist, 1984) indicated that this species was probably rarer than the other species of small spotted cats in the country, although large areas of suitable habitat remained.

Felis wiedii (vigens)

Distribution and status similar to Felis pardalis (Reichart pers. comm. cited in Melquist, 1984).

Panthera onca (onca)

No detailed information available. Reported to remain quite common in most areas away from the coastal belt (Reichart pers. comm. cited in Melquist, 1984).

Legislation

CITES entered into force in Suriname on 15 February 1981. The Game Law of 1954 and its implementing legislation, the Game Resolution of 1970, provided total protection for all mammal, bird and sea turtle species not listed as game species or as 'predominantly harmful' species. These laws prohibit hunting, transport, trade, sale, import and export of non-listed species. Of the species included in this report only Panthera onca was listed, as a game species (Fuller and Swift, 1985). Reichart (pers. comm. cited in Melquist, 1984) reported that P. onca was fully protected by special decree in 1983 in addition to its protection from commercial export in 1981 caused by Suriname's ratification of CITES. The principal limitation of both the Law and the Resolution has been their limited geographic scope. They both apply only to the northern, settled region of the country. Amendments to the Game Law, which among other measures extended the scope of the legislation to cover the whole country, were passed in November 1982. However the new Game Resolution implementing these amendments, although expected to be passed soon, is not known to have been adopted so far. Until this is done, the only protection afforded to most species in the interior is the control of hunting in National Parks and Nature Reserves. However the Suriname Government reportedly does not issue export permits for protected species from the interior except under exceptional circumstances. The main exception to the export ban allows export for scientific, educational and 'useful' purposes under permit (Fuller and Swift, 1985).

Harvest and international trade

Reichart (pers. comm. cited in Melquist, 1984) reported that there was little pressure to harvest the cats and otters on a commercial level in Suriname, although P. onca was reportedly occasionally killed by hunters and cattle ranchers. Furthermore Duplaix (1980) found that the otters were not hunted for food or for their skins in Suriname by the indigenous population.

CITES data indicate substantial exports of F. pardalis and F. wiedii skins in 1976 and 1977; the Customs data suggest that such trade continued until 1979. After that time no trade has been reported from Suriname. CITES data do not indicate any exports of otter skins from Suriname during the period 1976 to 1985.

CITES data - Suriname

Suriname has submitted annual reports to CITES for each of the years 1981 to 1985 inclusive. The table shows, for each taxon and for each year, the minimum number of skins (and bags of skins) in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Lutrinae</u>										
<u>L. longicaudis</u>	-	-	-	-	-	-	-	-	-	-
<u>P. brasiliensis</u>	-	-	-	-	-	-	-	-	-	-
<u>Felidae</u>										
<u>F. pardalis</u>	2742 + 10 bags (2742)	5871 (2912)	191 (0)	-	-	-	-	-	-	-
	+ 10 bags									
<u>F. tigrina</u>	-	-	-	-	-	-	-	-	-	-
<u>F. wiedii</u>	1595 (1595)	2847 (2107)	228 (0)	-	-	-	-	-	-	-
<u>P. onca</u>	-	-	-	-	-	-	-	-	-	-

Total exports of spotted cat skins from Suriname (no. of skins except where stated)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
CITES data										
Total exports	4337 + 10 bags	8718	419	-	-	-	-	-	-	-
Direct exports	4337 + 10 bags	5019	-	-	-	-	-	-	-	-
Customs data (imports)										
Belgium	-	-	13502	9431	-	-	-	-	-	-
F.R. Germany	2461	6358	-	-	-	-	-	-	-	-
UK	4120	4186	-	-	-	-	-	-	-	-

TRINIDAD AND TOBAGO

Species

Lutrinae

Lutra longicaudis (enudris)

Reportedly restricted to a few rivers on the north, south and east coasts (Bindernagel cited in Anon., 1984a).

Felidae

Felis pardalis (pseudopardalis)

The status of this species in Trinidad and Tobago is uncertain although it was described by Bindernagel (cited in Anon., 1984a) as common in some areas.

Legislation

CITES came into force in Trinidad and Tobago on 18 April 1984. The Wild Animals and Birds (Protection) Ordinance, 1933 protected all mammals and birds from hunting, unless they were listed in the attached schedule. Felis pardalis was included in the schedule accompanying the 1933 Ordinance without any indication of a closed season. The Wild Animals and Birds (Protection) (Amendment) Ordinance of 1941 modified the 1933 regulations, allowing hunting of protected animals under licence in listed Game Reserves, however the attached list of permitted game animals did not include Felis pardalis. The Conservation of Wildlife Act 1958 protected all species except those listed as game or vermin (Pyke, 1983). The cat and otter species were not included as either game or vermin under this legislation which has since been improved by a number of subsequent amendments. The native cat and otter species therefore remain fully protected in Trinidad and Tobago (James, 1983).

Harvest and international trade

Apart from the fact that hunting in general has been controlled by wildlife management measures for many decades, which implies that it may be of some significance to the national economy, nothing is known about the exploitation of the cat or otter species in Trinidad and Tobago.

Trinidad and Tobago has not submitted any annual reports to CITES. Neither has it been reported as the source of any of the skins of Felis pardalis or Lutra longicaudis included in reports submitted by other CITES Parties for the years 1976-1985.

UNITED STATES OF AMERICA

Species

Felidae

Felis pardalis (albescens, sonoriensis)

Found in eastern and southern Texas (Hall, 1981), perhaps restricted to habitat south of 30°N (Navarro, 1985). Also found in south-eastern Arizona (Hall, 1981). Population estimates vary, but the total number is reportedly probably less than 100, mostly in Texas. Reported as at least very rare (Anon., 1980d) and probably extinct in Arizona (Emmons pers. comm., 1987).

Felis wiedii (cooperi ?)

Evidence of the occurrence of this species in the USA was based on a single specimen taken at Eagle Pass, Texas prior to 1852 (Goldman, 1943). It is likely that this animal was an aberrant vagrant in which case the subspecies cooperi would be invalid.

Panthera onca (arizonensis, veraecrucis)

Virtually extinct. There is no evidence for the species' continued occurrence in New Mexico or Louisiana, both within its former range. It was described as essentially absent from other areas north of the Mexican border except as occasional stray individuals in the border counties of Texas and Arizona and perhaps New Mexico (Anon., 1980c).

Legislation

CITES entered into force on 1 July 1975. All three native cat species were listed on 30 March 1972 as endangered from Mexico southward under the Endangered Species Conservation Act, 1969. However, this classification did not include the native population of the USA and the species did not receive full protection under the subsequent Endangered Species Act, 1973. This discrepancy was noticed in 1980 and a proposal to list the native populations of the species was published. In 1982 full protection was extended to the populations of Felis pardalis occurring in Texas and Arizona (hunting of the species was already prohibited by Texan state law). The other two species were not included in this amendment, and as far as is known, they remain unprotected by Federal Law (Anon., 1982).

Harvest and international trade

No exploitation of the native population is known. Brush clearance and predator control activities have been listed as the main threats to the cats in the USA (Anon., 1980d).

The USA has submitted annual reports to CITES for each year from 1977 to 1984 inclusive. The USA has been a major importer of Latin American cat and otter skins but the only export of a skin of a native spotted cat species reported to CITES for the years 1976-1985, for which the USA was the reported source, was the export of one skin of Panthera onca in 1983. This skin was reported as an import by Canada however, as Canada does not report the origin of the transactions in its annual report, the skin may not have actually originated in the USA.

URUGUAY

Species

Lutrinae

Lutra longicaudis (longicaudis)

In 1981 it was reported to remain widespread, although exterminated in the larger rivers (Praderi, 1981 cited in Thornback and Jenkins, 1982). Melquist (1984) indicated that the population was reasonably stable.

Pteronura brasiliensis (paranensis)

Cabrera (1957) reported that this species inhabited the Uruguay River and its tributaries, however there have been very few recent records. The species may be extinct, although a few may remain on the upper Rio Negro on the border with Brazil (Praderi, 1981 cited in Thornback and Jenkins, 1982).

Felidae

Felis colocolo (munoi)

Occurrence confirmed by Ximenez (1970). Reported to have been scarce in the early part of this century (Sanborn, 1929); no more recent information available.

Felis geoffroyi (paraguae)

Ximenez (1973) reported that this species inhabited the whole of Uruguay; the species was relatively common throughout the country, certainly the most common cat species.

Felis wiedii (wiedii)

Described by Ximenez et al. (1972) as occurring throughout much of the country. Melquist (1984) thought that it was probably very rare and in 1981 it was described as endangered, the least abundant of the native cat species (Caviglia Tahier, 1981 cited in Thornback and Jenkins, 1982).

Panthera onca (palustris ?)

Reported by a number of informants to be extinct (Thornback and Jenkins, 1982).

Legislation

CITES came into force in Uruguay on 1 July 1975. Ley No. 9.481 of 1935 and its most recent implementing regulation, Decreto 261 of 1978, ban the hunting, transport and commercialisation of indigenous wildlife and wildlife products with the exception of fish. Limited exceptions to this ban exist: the hunting and trade of listed species designated as harmful; licensed sport hunting of a small number of listed indigenous and introduced species; licensed hunting and export for scientific or educational purposes; and regulated control of species whose population levels threaten other species or society. None of the native cats and otters are known to have been excepted from the ban on hunting, trade and export (Fuller and Swift, 1985). The Uruguayan CITES Management Authority informed Melquist (1984) that, although the harvest of spotted cats and otters was prohibited in the country and their export was banned, the import of wildlife was regulated in accordance with CITES.

Harvest and international trade

Not known to have been a major source of skins for the international trade. Melquist (1984) found garments made from cat and otter skins on sale in

numerous Montevideo stores. The most commonly displayed were coats of Felis geoffroyi but garments made of Panthera onca, Felis pardalis and Lutra spp. were also identified. Retailers stated that only the F. geoffroyi and other skins originated in Uruguay, the former mainly from the north and north-east of the country, while the skins of the other species came from Paraguay. Lienra (pers. comm. cited in Melquist, 1984), of the Department of Inspection, stated that although illegal trade from Paraguay persisted, the garments on sale in Montevideo were covered by proper documentation. However, in early March 1986 the Direction of Legal Control for the Ministry of Agriculture and Fisheries in Uruguay seized over 6000 skins from fur shops in Montevideo, including Felis geoffroyi skins, a coat made from Felis pardalis and skins of Lutra longicaudis. The skins were confiscated when it was found that identification stamps were false (Anon., 1986b).

Table 7

Skins recorded on sale in Montevideo, Uruguay in 1983 (Melquist, 1984).

Species	Number of stores	Price per coat (US\$)	Approx. number of skins per coat
<u>F. geoffroyi</u>	11	240-1600	30
<u>F. pardalis</u>	7	800-1700	25
<u>P. onca</u>	2	1500	?
<u>Lutra</u> spp.	4	1500	15

The only record of large numbers of spotted cat skins included in CITES data as imports from Uruguay were of F. tigrina and F. pardalis in 1978. Neither of these species has been confirmed as an inhabitant of the country. Customs data of F.R. Germany record substantial trade in Felid skins from Uruguay in 1979 and 1983 which does not appear in CITES statistics.

CITES data - Uruguay

Uruguay has submitted CITES annual reports for each of the years 1978 to 1982 inclusive. The table shows, for each taxon and for each year, the minimum number of skins in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Lutrinae</u>										
<u>L. longicaudis</u>	-	-	-	-	-	-	-	-	-	-
<u>P. brasiliensis</u>	-	-	-	-	-	-	-	-	-	-
<u>Felidae</u>										
<u>F. colocolo</u>	-	-	-	-	10 (0)	-	-	-	-	-
<u>F. geoffroyi</u>	-	-	-	-	-	-	-	-	-	-
<u>F. wiedii</u>	-	-	-	-	-	-	-	-	-	-
<u>P. onca</u>	-	-	-	-	-	-	-	-	-	-
<u>Species which do not occur in Uruguay</u>										
<u>[F. tigrina]</u>	-	-	10171 (10171)	-	-	-	-	-	-	-
<u>[F. pardalis]</u>	-	-	680 (0)	-	-	-	-	-	-	-

Total exports of spotted cat skins from Uruguay (no. of skins)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<hr/>										
CITES data										
Total exports	-	-	-	-	10	-	-	-	-	-
Direct exports					(0)					
<hr/>										
Species which do not occur in Uruguay										
[Total exports]	-	-	10851	-	-	-	-	-	-	-
[Direct exports]			(10171)							
<hr/>										
Customs data (imports)										
F.R. Germany	-	-	-	2677	-	-	-	7000	-	-
<hr/>										

VENEZUELA

Species

Lutrinae

Lutra longicaudis
(annectens?, enudris)

Found throughout the country, except for portions of the high Andes and the dry north-west. Considered most common in the south (Melquist, 1984).

Pteronura brasiliensis
(brasiliensis)

Distributed in the Orinoco River basin and perhaps still in the llanos region further north. It was fairly common in many rivers in the late 1950s but more recently it has been extirpated from large areas of its former range. Stated to be one of the two most endangered wildlife species in the country (Mondolfi and Trebbau, 1978).

Felidae

Felis pardalis
(maripensis,
pseudopardalis)

Considered widely distributed and moderately common by several Venezuelan biologists (Melquist, 1984). Hoogesteijn (in litt., 1987) reported that, north of the Orinoco, Ocelot were still common in forests and on private ranches with good gallery forest, and in some heavily forested national parks. He expected populations south of the Orinoco to be good as there had been little disturbance or settlement.

Felis tigrina
(pardinoides, tigrina)

Distributed throughout much of southern and north-western Venezuela (Zawisza, 1984). This distribution is reported to have been sparse and the species was generally considered rare in 1976 (Mondolfi, 1976). Listed as endangered by Zawisza (1984) and described by Hoogesteijn (in litt., 1987) as much rarer than the Ocelot.

Felis wiedii
(vigens)

Widespread but scattered (Handley, 1976). Zawisza (1984) described it as quite restricted and threatened, but the consensus of information gathered by Melquist (1984) was less pessimistic. Described by Hoogesteijn (in litt., 1987) as much rarer than the Ocelot.

Panthera onca
(onca)

Hoogesteijn et al. (1986) reported that the Jaguar had declined in the north, central and eastern areas of Venezuela, but its status was good in the south, especially in the Llanos, where it had increased in numbers; they estimated a total population of 4000-5000 Jaguar in Venezuela. Melquist (1984) reported that populations had certainly dwindled owing to over-harvest but appreciable numbers still remained.

Legislation

CITES came into force on 22 January 1978 in Venezuela. The principle law protecting wildlife in Venezuela is the Ley de Proteccion a la Fauna Silvestre of 11 August 1970. This law prohibits the taking and trade of all species of mammals, birds, reptiles and amphibians which have not been included in both the Official list of Game Species and the current hunting regulations. The

Official list of Game Species was established through Resolution MAC-RNR-5-276 of 13 November 1970. Some of these species, including all of the native spotted cats and otters, were included on a further list of entirely protected species which were determined as having population levels too low to permit hunting or trade (Resolution No. RNR-5-299 of 10 December 1970). The regulations allow the issuance of permits for the collection of scientific specimens and the killing of pest animals. Furthermore the authorities may permit hunting of and trade in species classified as harmful, although no species are known to have been so designated (Fuller and Swift, 1985).

Harvest and international trade

Both commercial and sport hunting of Jaguars had been widespread in Venezuela prior to the 1970s (Hoogesteijn *et al.*, 1986). Mondolfi and Trebbau (1978) reported that in the 1970s, despite the fact that the cats and otters had been legally protected since 1970, clandestine commercial hunting continued. Much of the hunting was reportedly sponsored or carried out by Colombian and Brazilian skin traders. Trade from the Orinoco region passed through Puerto Carreno into Colombia, trade from the Amazonas territory was usually smuggled into Colombia along the Vichada, Inirida or Guaviare Rivers, and Brazilian traders from Manaus moved in and out of Venezuela on the Rio Negro. Pteronura skins were reportedly worth 500 Bolivars or about 2000 Colombian Pesos to a hunter.

An official of the Venezuelan Government stated in 1979 that P. onca was regularly hunted, both by ranchers killing problem animals and by sport hunters for its skin; the level of this illegal harvest was unknown (Mendez, pers. comm. cited in Ellis, 1979). Melquist (1984) was informed that the spotted cats and otters had been over-harvested in the past and that poaching remained a problem. Although cattle ranching was reportedly expanding at a significant rate, the owners of several large ranches were prepared to tolerate a certain amount of livestock loss to Jaguars. Hoogesteijn (*in litt.*, 1987) reported that although, in recent years, habitat loss has been the main threat to the native spotted cats in Venezuela, Ocelot are sometimes hunted as chicken raiders and some small-scale skin smuggling continues.

Very few skins from this source were reported in the CITES annual report data but a total of over 12 000 Felid skins was recorded in the German Customs reports as having been imported from Venezuela during the years 1977-1979. After 1979 reported imports were minimal; in fact no skins from this country were recorded after 1979 in the customs data analysed.

CITES data - Venezuela

Venezuela submitted annual reports to CITES for each of the years from 1981 to 1985 inclusive. The table shows, for each taxon and for each year, the minimum number of skins in trade which reportedly originated in this country. The figures in parentheses show the number of specimens reported in direct trade from this country (see Appendix A of the present report for explanation).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Lutrinae</u>										
<u>L. longicaudis</u>	-	-	-	-	-	-	-	-	-	-
<u>P. brasiliensis</u>	-	-	1 (0)	-	-	-	-	-	-	-
<u>Felidae</u>										
<u>F. pardalis</u>	-	-	-	-	-	-	-	-	-	9 (9)
<u>F. tigrina</u>	-	-	-	-	-	1 (1)	-	-	-	-
<u>F. wiedii</u>	-	-	-	-	-	-	-	-	-	-
<u>P. onca</u>	-	-	-	-	-	-	-	-	-	1 (1)

Total exports of spotted cat skins from Venezuela (no. of skins)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>CITES data</u>										
Total exports	-	-	-	-	-	1 (1)	-	-	-	10 (10)
Direct exports										

Customs data (imports)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
F.R. Germany	-	515	4833	7438	-	-	-	-	-	-

3. INTERNATIONAL TRADE.

The skins of wild cats and otters have been highly valued by the fur trade for many decades. The trade, mainly producing 'fashion garments', has focused on what have been perceived as the more attractive skin patterns, textures and colours, often concentrating on the larger species the skins of which are needed in fewer numbers per garment. In Latin America, in the earlier years of the present century, the Jaguar was hunted for its skin in large numbers. However apparent over-harvest combined with increasing human destruction of habitat caused the numbers available to hunters to decline greatly by the 1960s. At that time the fur trade began to shift its attention to the smaller cats. During most of this time the neotropical otters were being steadily harvested, the skin of the Giant Otter having been the most valuable (Inskipp and Wells, 1979). In the 1960s the trade apparently reached a peak before legislation, at both national and international levels, combined with the increasing difficulty in obtaining large numbers of skins, due to declining populations, led to substantial reductions in the number of skins in trade. The international trade in neotropical cats and otters is described below in two parts: firstly historical information on the trade up to the early 1970s, based largely on literature references to the species involved and the volume and dynamics of skin movements; secondly details of the recent trends in trade, for which far more quantitative data are available.

3.1 The skin trade until the early 1970s.

The period between the end of the Second World War and the early 1970s was termed 'The golden era of the Amazon skin trade' by McGrath (1986). Wild populations of the cats and otters had not been exploited on a large scale and the world economy was generally expanding. The fur industry grew rapidly to meet the demand for wild furs and skins. In Brazil, modern tanneries were established in Manaus and Belem and an extensive commercial network linked the professional hunters, or gateiros, with the urban dealers (McGrath, 1986). Similar infrastructures built up in other countries to supply the export trade. Reliable quantitative data detailing cat and otter skin exports from Latin America for the period up to the early 1970s are difficult to obtain. Some data are available for exports from Brazil, Peru and a number of other countries, however it is extremely difficult to assess what proportion of the total world trade these data might represent. The situation is further complicated by changes over the period in the species involved in trade and the countries from where they were obtained.

Spotted cats

As McMahan (1983) pointed out, the USA was the major importer of Latin American cat skins until the 1970s although increasing numbers were imported into Europe during the 1960s, especially into the Federal Republic of Germany. Myers (1973) presented the following data, detailing official imports of Ocelot and Jaguar skins into the USA during the period 1968-1970 (Table 8) (the term 'ocelot' in this case probably includes species of small spotted cats other than Felis pardalis).

Table 8 Official import of Ocelot and Jaguar skins into the USA
from Latin American countries, 1968-70 (No. of skins)

SOURCE: US Department of the Interior (Myers, 1973).

Source	Ocelot				Jaguar			
	1968	1969	1970	Average % 68-70	1968	1969	1970	Average % 68-70
Argentina	1253	5204	2704	3	201	278	482	3
Bolivia	16172	513	698	5	1190	51	20	4
Brazil	60499	81226	49528	55	8093	6389	4979	63
C. America	1612	2423	3824	2	343	339	342	3
Chile	-	-	972	<1	-	-	-	0
Colombia	28132	23823	11880	18	881	883	428	7
Ecuador	989	293	1532	1	33	24	46	<1
Guyana	187	160	161	<1	12	16	29	<1
Mexico	5603	6186	3692	4	592	452	236	4
Paraguay	4532	3293	2297	3	1797	585	605	10
Peru	3170	2938	4228	3	157	689	449	4
Venezuela	3777	4080	2796	3	25	91	36	<1
Others	3040	2930	5305	3	191	34	106	1
TOTAL	128966	133069	87645		13516	9831	7758	

The dominance of Brazil as the major source of skins during these years should be somewhat surprising as all such exports were prohibited by law in 1967. These skins are apparently the 'old stocks' allowed to be exported during the 'grace period' which the Brazilian Government granted to the skin traders. Langenberger (*in litt.*, 1986), General Manager of the Verband der Deutschen Rauchwaren und Pelzwirtschaft e.V., stated that in the mid-1960s most cat skins imported into F.R. Germany were from Peru and that, in later years, Brazil, Colombia and Bolivia were major sources; the major importer of skins was reported to have been the USA, even as recently as 1978. Fehns (*in litt.*, 1986), a major skin trader, reported that the major exporters of both cat and otter skins had been Brazil, Bolivia, Peru, Paraguay, Ecuador, Colombia and Argentina, with limited quantities exported from the Guianas.

Evidence therefore suggests that during this 'Golden era' the major source of skins was the Amazon region, the major exporter having been Brazil. The volume of the trade in cat skins during this period is difficult to estimate accurately. Imports of Ocelot skins into the USA during the period 1968-1970, detailed in Table 8, averaged well over 100 000 skins a year. Data presented by McMahan (*in press*) indicate that Ocelot skin imports into the USA increased from about 100 000 in 1960 to a peak of over 133 000 in 1969, before falling sharply to 87 000 in 1970, less than 30 000 in 1971 and less than 1000 in 1972 and 1973 as the US Endangered Species Act 1973 was introduced. These data reinforce the statement made by Langenberger (*loc. cit.*) that the world trade in small spotted cat skins during the late 1960s amounted to over 120 000 skins per year, most of which were imported into the USA. Imports of Jaguar skins were not detailed in US published statistics until 1968. The data tabulated above indicate a decline in the numbers of skins imported; this has been shown to have continued in 1971 and 1972, after which no further imports were reported to have taken place (McMahan, *in press*). The number of skins in trade during earlier years is unknown, however figures detailing the weight of skins exported from Brazil were given by Doughty and Myers (1971).

Table 9 Destination of Jaguar skins exported from Brazil, 1957-1969 (in kg)

SOURCE: Doughty and Myers (1971). From Official Brazilian statistics.

	1957	1960	1963	1966	1969
USA	4480	3219	991	15243	30085
F.R. Germany	68	379	315	3405	8762
UK	1037	869	75	2500	8615
Italy	8	68	-	-	-

The above table indicates that the US imports reported for 1968 and 1969 may have represented the peak of the number of Jaguar skins in trade, although no data for years before 1957 have been found.

The volume of international trade involving the other spotted cat species prior to the early 1970s, remains largely unknown. The imports of 'ocelot' into the USA are known to have included other small spotted cats. The reported exports from Iquitos, Peru, detailed under the country section of the present report, include separate records of Margay skins for the years 1946 to 1966. No skins of this species were reported to have been exported until 1961, after which exports increased to over 4000 skins in 1966; however details are not available for the subsequent years. Langenberger (*in litt.*, 1986) reported that most of the skins in international trade were from the Ocelot and that the other small cats only appeared on the market as the numbers of Ocelot skins available decreased. Furthermore, Grimwood (1969) stated that Ocelot skins alone had any commercial value in Peru until 1961 when Margay skins began to enter trade; skins of the other small spotted cats were reportedly valueless throughout the 1960s. Therefore, although few records are available, owing to the use of the general heading 'ocelot' in Customs reports, it is unlikely that the skins of the other small spotted cats were traded in comparable numbers to those of the Ocelot before the early 1970s. However it is likely that such skins were included in small numbers in shipments of Ocelot skins.

Otters

The extent of international trade in neotropical otter skins is even more difficult to estimate than that of spotted cat skins. Otters have seldom been included in a separate category of customs reports and in comparison to the trade in cat skins little has been published concerning the trade in otters. Giant Otter skins were equal in value to those of the Jaguar in 1966 in Peru (Grimwood, 1969). Exports of Giant Otter skins from Peru for the years 1946 to 1973, from Colombia for 1965 and 1970 to 1972 and exports from Brazil during the period 1960-1969 are detailed in the respective country sections of the present report. A breakdown of the Brazilian export figures for 1957-1969 indicated that the vast majority of the skins in trade in 1957, 1960 and 1963 were exported to the USA, while the smaller numbers of skins in trade in later years were largely exported to F.R. Germany. Details of exports from other countries have not been found and, as import figures for the major consuming countries are not available, it is uncertain what proportion of the total world trade during this period is covered by the available data. Nevertheless it seems likely that the Brazilian exports would have accounted for a significant proportion of the total number of skins in trade.

Exports of River Otter skins from Chile, Peru and Colombia are also detailed in the country sections of the present report. Detailed figures are not available for Brazil, however Smith (1981) reported that River Otter pelts had been exported in smaller numbers than those of the Giant Otter, a total of 3710 skins having been officially exported from the Brazilian Amazon between 1959 and 1972. Langenberger (loc. cit.) reported that between 5000 and 15 000 skins of this species were imported into F.R. Germany each year until 1981. Certainly River Otter skins were traded in large numbers, on an international scale probably far larger than the numbers of Giant Otter skins in trade, however the extent of this trade is difficult to quantify given the lack of data. The remaining two neotropical Lutra species, L. felina and L. provocax have both been exploited for their skins (Thornback and Jenkins, 1982) however no data have been obtained detailing any international trade involving skins of these species. Fehns (in litt., 1986) stated that neither of these species had been of importance to the international fur trade.

3.2 Recent trade

International trade since the early 1970s is here regarded as recent trade. Generally, far more quantitative data are available for this period than for earlier years. The species involved and the number of skins traded have been increasingly influenced by national and international legislation in recent years. Furthermore there is evidence that the numbers in trade of some species involved declined because their populations had been severely over-exploited in some countries and hunters could no longer sustain their supply. Trade data from the reports of CITES Parties and from published overseas trade reports are included as Appendices A and B, respectively, of the present report. Recent trade is analysed by species and in terms of the total numbers of skins involved.

3.2.1 Species

The following summarises recent trade by species; most of this information has been based on CITES annual reports (see Appendix A) which are most valuable for these species for the years from 1977 onwards when both the USA and F.R. Germany were producing annual reports. The total net trade, calculated from CITES data, for each species is summarised in Tables 10 and 11.

Lutra felina

The only trade in this species reported by CITES Parties was one garment in 1983. The species has been fully protected from commercial trade by national laws and by listing in Appendix I of CITES. The lack of reported trade suggests that although illegal trade may continue, international commercial trade in this species on any significant scale is unlikely to have taken place in recent years.

Lutra longicaudis

Commercial trade in skins of this species apparently continued until at least 1984, although no skins were reported to have been imported directly from their countries of origin after 1980 when the largest number of skins, amounting to a total net trade of 37 443, was reported. No trade was reported for 1978 or 1985 and the numbers of skins decreased steadily from the peak in 1980. CITES data reveal that the major exporter was Paraguay, smaller numbers

Table 10

Total net trade in Latin American lutrinae, 1976-1985 (number of skins)
(from Annual Reports of CITES Parties)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Lutrinae spp.	-	16003	23531	46	-	-	1	-	4	-
<u>L. felina</u>	-	-	-	-	-	-	-	-	-	-
<u>L. longicaudis</u>	-	1707	-	23839	37443	19925	5066	527	157	-
<u>L. provocax</u>	-	-	-	-	-	-	-	-	902	-
<u>P. brasiliensis</u>	-	-	-	-	1	1007	1	-	1	-

SOURCE: Appendix A

Table 11

Total net trade in Latin American felidae, 1976-1985 (number of skins)
(from Annual Reports of CITES Parties)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<i>Felidae</i> spp.	-	2933	149286	-	-	-	-	-	-	-
<i>F. colocolo</i>	-	-	19	2730	11046	4299	42	361	-	-
<i>F. geoffroyi</i>	174	7137	42642	70168	66615	84900	22533	78278	22473	1751
	-	-	-	-	-	-	-	-	363 kg	-
<i>F. guigna</i>	-	-	-	-	-	-	-	-	-	-
<i>F. jacobita</i>	84	-	-	-	-	-	-	-	-	-
<i>F. pardalis</i>	12986	19342	34521	17088	30563	17730	9676	69294	4574	556
<i>F. tigrina</i>	8991	13420	48289	23545	33489	35058	68163	84493	35007	2053
	-	-	-	-	-	-	-	-	606 kg	-
<i>F. wiedii</i>	7127	22369	20048	12413	19981	17526	13200	8590	4155	138
Total for <i>Felis</i> spp.	29362	65201	294805	125944	161694	159513	113614	241016	66209	4498
	-	-	-	-	-	-	-	-	969 kg	-
<i>P. onca</i>	790	47	19	48	617	46	23	24	22	1

SOURCE: Appendix A

of skins were reported to have originated in Peru, Honduras, Panama and a number of less significant sources. The Federal Republic of Germany reportedly imported the vast majority of the skins in trade, although Austria, Belgium, Czechoslovakia, Greece and Switzerland apparently imported significant numbers in some years. The fact that trade in this species continued into the 1980s was facilitated by nomenclatural complications in the listing of the species in the CITES Appendices. Paraguay, the main source of the large numbers of skins traded in 1979 and 1980, is inhabited only by the subspecies platensis which was listed in CITES Appendix I in 1975. The large numbers of skins in trade were usually recorded as subspecies enudris or incarnum which were not included in the Appendix I listing until 1983 and do not occur in Paraguay, therefore the legality of the exports from Paraguay was questionable at an international level, irrespective of the status of the Paraguayan export ban introduced in 1975 which was not fully implemented. Similarly the large numbers of skins in trade in 1977 and 1978 which were recorded as *Lutrinae* spp. were mainly imported from Paraguay and may have been reported as such in order to avoid identification as native Lutra skins which would probably have been those of an Appendix I species.

Lutra provocax

The only report of trade involving this species was the export of 902 skins from the USA to F.R. Germany in 1984. It is possible that these skins were misidentified or wrongly reported.

Pteronura brasiliensis

With the exception of a total of nine skins, reported in most cases as personal items, the only trade in skins of this species reported by CITES Parties between 1975 and 1985 was the export of 1007 skins into F.R. Germany from Italy, origin Paraguay, in 1981. These skins were reported by the Italian Management Authority to have been re-exported under uncertain circumstances which were under investigation at the time. With the exception of that one transaction, the legal status of which is unknown, there is no evidence of continued commercial trade in this Appendix I species. The fact that 1000 skins could appear in trade as recently as 1981 may indicate that illegal trade continues but there is no further evidence to support this.

Felis colocolo

This species was not included in the study carried out by Melquist (1984). However considerable numbers are known to have entered international trade. A total of 78 239 specimens were reported to have been exported from Buenos Aires, Argentina, between 1976 and 1979 inclusive, with a value of US\$ 1.8 million; this represented less than one percent of the total value of wildlife exports during this period (Mares and Ojeda, 1984). The trade reported by CITES Parties illustrates that the number of skins in trade decreased sharply after 1980. The only skins reported to have been traded after 1982 were 361 which were re-exported from France to the Federal Republic of Germany and were then apparently returned to France in 1983. After 1981 the number of skins reported to have been traded was negligible. This is coincident with the instigation of legal protection for this species in Argentina. Before this the main sources of skins were Argentina and Paraguay. The main importing countries were Federal Republic of Germany and, to a lesser extent, Switzerland and Spain.

Although these data show that a large number of skins of this species did enter trade during the 1970s, there is no evidence that large scale commercial trade existed before that time and the trade seems to have declined sharply

since 1980. Two sources of information in the German skin trade reported that this species had never been of great importance to the fur trade (Fehns, in litt., 1986; Langenberger, in litt., 1986).

Felis geoffroyi

A study of the German skin trade (Caldwell, 1984) reported that Felis geoffroyi seemed to have been increasingly heavily exploited since 1978, when Paraguay began to replace Brazil as the main supplier of skins to the world market. In 1981 over 70 000 skins of this species were imported into F.R. Germany. Caldwell (1984) noted however that, in 1982, there was a marked decrease in the number of these skins reported by CITES Parties as imports from Paraguay.

The major source of the skins in trade was Paraguay and to a lesser degree Argentina. The CITES data in Appendix A indicate that the decline in 1982, noted by Caldwell (1984), was temporary, and that over 78 000 skins mainly of Paraguayan origin were reported in trade in 1983. However, since 1982, the number of skins reported each year as direct exports from countries with wild populations of the species has decreased considerably, despite large numbers having been exported from Bolivia in 1984 and 1985.

It can be seen that the Federal Republic of Germany was the major consumer of skins during recent years. The decrease in the number of skins imported in 1984 and 1985 reflects the lack of legal sources to supply the trade, however the recent Bolivian export ban did not enter into force until August 1985, so until 1986 trade data become available it will not be possible to conclude whether export bans have been effective.

Felis guigna

With the exception of five 'scientific' specimens, this species has not been reported by CITES Parties to have been involved in international trade.

Felis jacobita

The export to Spain in 1976 of 84 skins of this species from the United Kingdom, origin South America, was the only report by CITES Parties of commercial trade between 1976 and 1985. The species is known to have been hunted for its skin (Mares and Ojeda, 1984), however there is no further evidence to suggest that significant commercial trade has taken place.

Felis pardalis

Historically one of the most heavily exploited cats in international trade, the Ocelot appeared in generally decreasing numbers in skin trade statistics after 1978 (Caldwell, 1984). However large numbers of skins were traded during the late 1970s. In 1975, the United Kingdom alone imported 76 838 skins (Burton, 1976). The CITES data show a general decline after 1978, from a total net trade of 34 521 skins in that year to only 556 in 1985, although in 1983 the number reported increased inexplicably to over 69 000 skins. Paraguay can be seen to have been the major source of skins in trade. The number of skins reported as direct exports from countries with wild populations of the species decreased significantly after 1980. The large number of skins in trade in 1983 was exported from France to the Federal Republic of Germany; these may have been in stock for some time and certainly without these skins a steady decline of the number in trade after 1978 is clear.

An important point to be made about this trade is that the only Ocelot which occurs in Paraguay is Felis pardalis mitis which is listed in CITES

Appendix I. Therefore if the skins really did originate in Paraguay they should not have been in trade. Paraguay is known to feature as a re-exporter for large numbers of wildlife skins smuggled out of Brazil and, in any case, all exports of wildlife products have been illegal since 1975 (Fuller and Swift, 1985).

The Federal Republic of Germany was the major importer of skins during this period, although in 1984 it was a net exporter and France emerged as the main importer. Generally the majority of the trade went to western European countries.

Felis tigrina

Skins of this species have often been confused with other spotted cat skins in trade, especially those of Margay. Analysis of CITES annual reports for 1977 showed that the trade comprised at least 13 000 skins (Anon, 1980b). A report on South American cats in trade between 1976 and 1982 showed that this species was one of the four most heavily exploited small cats. Around 20 000 skins were reportedly exported from Paraguay in 1978, and the number increased each year until 1983. By 1982 this species apparently supplied the great majority of the spotted cat skins in trade, replacing Geoffroy's Cat which had been most heavily exploited until then (Caldwell, 1984). Recent CITES data are summarised in Appendix A. The number of skins in trade reached a peak in 1983 when the total net trade reported was 84493 skins; this number declined to 35007 in 1984 and 2053 in 1985. Paraguay was the reported source of the majority of the skins in trade. Although the number of skins in trade each year reported as originating in Paraguay increased until 1983, the number of skins reported as exports from Paraguay in each year decreased. After 1982 most of the skins reported with this origin were not direct imports. Those recorded by weight (606 kg in 1984 imported by Japan from Paraguay) are likely to comprise part of the 12 000, reported by number of skins, as re-exported from Japan to F.R. Germany in that year, in which case they can be deducted from the total.

An important point to note is the emergence of Bolivia as a major source of skins in 1984 and 1985 as there is no evidence that the species even occurs there and, in any case, all cat species are protected in the country (Fuller and Swift, 1985).

The vast majority of the skins in trade were imported into western Europe, with F.R. Germany the major importing country. Belgium imported a large number of skins in 1980, and France imported a large number in 1984 and some skins in 1985, most of which were reported to have been imported from Bolivia.

Felis wiedii

An analysis of the international trade in Felidae in 1977, found that the trade during that year involved at least 30 000 skins of Felis wiedii though the precise number was impossible to estimate owing to the large amount of unrecorded trade and smuggling, and the lack of correlation between import and export figures for the countries involved (Anon, 1980b). Data based on imports from Paraguay during 1978 to 1982 illustrated an overall decline in the trade (Caldwell, 1984). Recent CITES data confirm this overall decline to have been true for total world net trade. Over 20 000 skins of this species were reported in trade by CITES Parties in 1977 and 1978 but by 1985 the total trade was only 138 skins. The main source of skins is reported to have been Paraguay. The number of skins reported in trade decreased from 1980 to 1984, by which time very few skins were reported to have been exported from countries with wild populations of the species apart from Paraguay.

The bulk of the skins in trade were imported by western European countries. Up to 1982 the Federal Republic of Germany and Italy were the major importing countries, however in 1984 France was the main importer.

Panthera onca

The trade in Jaguar skins had apparently already declined greatly by the late 1960s (McMahan, in press). Inclusion in CITES Appendix I, and full protection in most countries where it occurred had reduced the trade to very low levels by the mid 1970s. CITES data indicate that legal trade was negligible for most years after 1976, but in both 1976 and 1980 large numbers of skins appeared in annual reports. In 1976, of 790 skins reported in trade, all except 100 skins from Brazil were re-exports of potentially old stocks of skins. However the total net trade of 617 skins reported for 1980 was dominated by a reported import of 587 skins into Italy directly from Paraguay annotated in the Italian annual report to CITES as 'goods imported under special contingencies'. An average of around twenty live animals were reported in trade each year. Most of these were captive-bred specimens, largely for zoological purposes. Although prized as a hunting trophy, reported trade in this species did not reflect any large amounts for this purpose.

3.2.2 Total numbers in trade

Otters

Total net trade in neotropical otters reported by CITES Parties is illustrated in Table 10. The only significant commercial trade was reported as *Lutrinae* spp. in 1977 and 1978 and then as exports of *Lutra longicaudis* from 1979 onwards. The total number declined after 1980 and no neotropical otter skins were reported in trade in 1985. None of the published overseas trade reports which were analysed contained any useful information on the trade in otter skins. A German fur trade representative stated that imports of neotropical otter skins had ceased after 1981 and that the market for such skins had largely disappeared. Therefore despite the lack of further data to reinforce the evidence provided by CITES statistics it seems likely that commercial international trade has declined to very low levels, although the extent of illegal trade is unknown.

Spotted Cats

Table 11 lists total net trade in all of the spotted cats species as reported by CITES Parties. Table 12 summarises the numbers of Felid skins included in the Customs reports and other overseas trade statistics that were analysed. The numbers reported by each country are detailed in Appendix B. One major problem encountered in attempting to analyse data from a number of such reports is the inconsistent reporting of countries of origin and export. For example the Customs report of the Federal Republic of Germany, under the title 'countries of export', gives the country of origin if it is known. Therefore if Paraguay exports skins to France, which are then re-exported to F.R. Germany, the skins are recorded in the German customs report as having been imported from Paraguay. Unless this was a direct transit shipment, it is likely that these skins may also appear in the French report as imports from Paraguay. The situation is further complicated by the fact that if, in the previous example, the F.R. Germany authorities had not known the origin of the skins they would be reported as imports from France.

Table 12

Total imports of wild cat skins from Latin America
included in all overseas trade reports collected

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Argentina	85213 1300 kg	71049	47868	19940	6269 38 kg	6225	-	13591	4503	-
Belize	504	642	739	-	-	-	535 kg	8 kg	153 kg	-
Bolivia	-	12390	10956	-	-	-	-	6166	-	37152
Brazil	107919	79257	66970	83482	44546	-	-	1499	19451	-
Colombia	1600 kg	3300 kg	-	-	-	-	-	-	-	-
Ecuador	15248	4456	2253	1483	3004	-	-	-	-	-
El Salvador	2096	-	482	-	-	-	-	-	-	-
Honduras	809	-	-	-	-	-	-	-	-	-
Mexico	2222	899	654	-	-	-	-	-	-	-
Nicaragua	9017	12125	5985	698	1204	-	-	-	-	-
Panama	5579	687	-	889	-	-	-	-	-	-
Paraguay	718	1349	1379	-	1456	-	-	-	-	-
	28839	105529	180677	231555	175012	127098	144283	291717	71175	-
Peru	-	-	-	6400 kg	3323 kg	9546 kg	14834 kg	592 kg	406 kg	100 kg
Suriname	1275	13624	14775	6732	3867	-	-	-	-	-
Uruguay	6581	10544	13502	9431	-	-	-	7000	-	-
Venezuela	-	-	-	2677	-	-	-	-	-	-
	-	515	4833	7438	-	-	-	-	-	-
TOTAL	266020	313066	351073	364325	235358	133323	144283	319973	95129	37152
	2900 kg	3300 kg	-	6400 kg	3361 kg	9546 kg	15369 kg	600 kg	559 kg	100 kg

SOURCE: Appendix B

Other countries report trade by various criteria. The Belgian Customs report stated that the original source was given unless a commercial transaction involving the shipments had taken place en route. The Netherlands Customs report stated that the country of provenance was the country of origin unless the shipment had been 'legally' stopped in transit. This confusion was not a problem in all cases; the UK Customs report included details of trade by country of origin as well as by country of consignment, thus only the latter was extracted to minimise double counting of world trade. In the case of trade in cat and otter skins from Latin America, this problem does not totally invalidate the picture gained from published overseas trade statistics, as the trade has historically been dominated by direct imports into the Federal Republic of Germany. It is however apparent that as international wildlife trade legislation began to have significant effects on the trade, certainly after 1981-1982, more skins were imported into France and re-exported to F.R. Germany. Customs data indicate that the Federal Republic of Germany imported by far the majority of the skins included in the total trade figures extracted from Customs reports in every year. In 1982, 1983 and 1984 France also imported large numbers of skins. Over the ten year period from 1976, Paraguay was by far the largest source of skins, although Brazil was an important source until 1980 and in 1985 the only major source of skins was Bolivia.

Considering the great potential for double counting when combining Customs data from different countries, caused by different methods of reporting in Customs reports, great care must be taken in comparing the Customs data with those reported by CITES Parties. Further considerations to be taken into account are, that some of the skins in the customs report may have been held in a third country for a number of years before being imported and, that the CITES data for 1984 and 1985 do not include trade within the European Economic Community.

Overall the numbers of skins reported in trade in the customs reports are larger than those included in the CITES data in most years, however the figures are reasonably comparable for some years, especially since 1980. Comparison of the sources of skins detailed in the customs reports with the reported sources of all small Felid skins in the CITES data (Table 13) confirms the dominance of Paraguay as the major exporter during recent years. Other important sources indicated in both sets of data were Argentina, Brazil (until 1980), Bolivia (after 1982), Peru and Suriname.

With the exception of Bolivia, very few skins were reported by CITES Parties as direct exports from Latin American countries in 1984 and 1985. The total numbers of skins in CITES and Customs data fell sharply by 1985, indicating a real decline in the international trade in small spotted cat skins from Latin America.

3.2.3 Illegal trade

The trade data analysed in the present report indicate that illegal trade in cat and otter skins has operated from a number of sources in recent years. Large numbers of skins have been recorded in trade, originating in countries such as Bolivia, Brazil and Paraguay, many years after trade bans had been implemented in the source countries. The exact extent of illegal trade, past and present, remains a largely unknown factor. Evidence suggests that in the past, large numbers of illegally obtained skins were traded openly by exploiting poor border controls in Latin America and by mis-reporting countries of origin on documentation. Such methods were especially easy to

Table 13

Reported sources of Latin American small spotted cats in trade, 1976-1985
(including all trade in Felis spp. and Felidae spp. reported by CITES Parties)

Original source data extracted from Appendix A.
Figures in parentheses indicate direct exports (for explanation see Appendix A).

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Argentina	779 (605)	9727 (5408)	41257 (40972)	16592 (16568)	11801 (10933)	6477 (5099)	3169 (1)	8 (8)	2024 (0)	-
Belize	-	195 (195)	593 (593)	264 (364)	341 (341)	2 (2)	68 (1)	28 (2)	1 (1)	-
Bolivia	-	-	2141 (510)	-	7 (7)	3 (3)	-	3314 (3314)	30826 (30826)	3790 (3318)
Brazil	11624 (7042)	4961 (3987)	1491 (0)	394 (0)	1 (1)	114 (2)	50 (0)	11 (1)	-	-
Colombia	3715 (0)	365 (365)	-	-	294 (6)	131 (15)	17 (17)	15 (11)	1 (1)	-
Costa Rica	-	-	-	-	1 (1)	-	-	1 (1)	1 (1)	-
Ecuador	-	-	416 (416)	-	3 (3)	9 (8)	26 (24)	3 (2)	3 (1)	-
El Salvador	-	-	-	-	-	1 (1)	-	-	-	-
Guatemala	-	-	-	-	1 (1)	-	-	-	1 (1)	-
Guyana	-	-	-	-	-	1 (1)	-	1 (1)	-	-
Honduras	63 (63)	34 (34)	3335 (117)	261 (261)	1581 (1)	10 (10)	2 (2)	2 (2)	2 (2)	-
Mexico	1802 (418)	-	1456 (315)	-	5 (5)	17 (5)	16 (2)	12 (8)	12 (11)	-
Nicaragua	-	-	-	-	-	3 (3)	7 (7)	-	1 (1)	-

Table 13 continued

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Panama	-	373 (373)	93 (93)	732 (549)	4081 (4081)	20 (20)	-	3 (1)	-	-
Paraguay	6531	18457	180111	96610	141726	151929	111741	246899	30746 + 969 kg	460
	(0)	(11214)	(180111)	(93849)	(139054)	(126092)	(70459)	(34375)	(2600) (969 kg)	(0)
Peru	22	14512	19388	7832	3522	38	3	9	-	-
	(0)	(14512)	(19388)	(7832)	(2509)	(20)	(3)	(6)	-	-
South America	9581	6272	28578	469	299	103	-	-	268	112
	(0)	(0)	(0)	(0)	(0)	(0)	-	-	(0)	(0)
Suriname	4337	8718	419	-	-	-	-	-	-	-
	+ 10 bags									
	(4337)	(5019)	(0)							
	(+ 10 bags)									
Uruguay	-	-	11531 (10171)	-	10 (0)	-	-	-	-	-
Venezuela	-	-	-	-	-	1 (1)	-	-	-	9 (9)

operate while a large number of legal source countries remained. CITES procedures have been blatantly abused; for example large numbers of Felis pardalis skins have been reported as originating in Paraguay which is apparently only inhabited by a CITES Appendix I subspecies which should therefore not appear in commercial trade. In theory, illegally obtained skins should be becoming increasingly difficult to launder as more countries implement export bans. By 1986, very few countries could be openly stated as legal sources of skins. This situation, although apparently facilitating greater control of the skin trade, may also have caused such commerce to operate wholly by smuggling without any documentation; if so, the extent of illegal trade could become far more difficult to assess.

There is little very recent evidence of illegal large-scale commercial trade in neotropical cat and otter skins. However a number of seizures of skins have been reported. A survey of the confiscated skins held by IBDF offices in Brazil carried out in 1982 revealed skins of Felis pardalis, F. wiedii, Panthera onca, Lutra longicaudis and Pteronura brasiliensis; these confiscations were thought, by the researchers involved, to have indicated the continuance of hunting and trade in these species over fifteen years after such activities were prohibited by Brazilian legislation (Duarte and Rebelo, 1985). In March 1986 skins of Felis geoffroyi, Felis pardalis and Lutra longicaudis were included in seizures of almost 6500 skins, 47 garments and 58 kg of skins from fur shops in Montevideo, Uruguay (Anon., 1986b). Other reports have described attempts to launder skins obtained in Bolivia in the European market and, recently, Spanish Customs detained a shipment of 5000 cat skins which had already been refused entry by the authorities of F.R. Germany. The shipment held by Spanish Customs reportedly originated in Paraguay in 1982. However Paraguay banned the export of wildlife in 1975 (Anon., 1987b).

Reports of the decline in demand for cat and otter skins in the major former markets and increased trade restrictions are reflected by the small numbers of skins recorded in legal trade in recent years. However financial incentives for trade almost certainly remain, as do problems with the control of international trade, such as the enforcement of border controls and poor implementation of CITES in some countries.

4. SUMMARY AND CONCLUSIONS

The available data provide evidence that the trade in Latin American cats and otters reached a peak during the 1960s and 1970s. By 1985, a combination of trade controls at national and international levels, and some reduction in the demand for spotted cat skins, had caused a great decrease in the number of skins in legal trade, although the levels of illegal trade remain largely unknown. The species exploited by the fur trade seem to have changed in response to availability.

Otters

Skins of Pteronura brasiliensis were exported in large numbers until the mid-1970s and Lutra longicaudis skins continued to appear in international trade until the early 1980s. Generally the neotropical otters have been heavily exploited for many decades and, although population sizes are poorly known, evidence suggests that all of the species have been over-harvested to some extent. They are all fully protected from commercial international trade and, by the mid-1980s, very few skins of these species continued to reach the market. The effects of any continuing illegal skin trade are probably insignificant on a regional scale in comparison to the threats of habitat destruction and degradation.

Spotted cats

The Jaguar, although heavily hunted for the fur trade in the past, has apparently not been involved in international trade in significant numbers in recent years. Evidence from most countries suggests that this species may have been over-harvested and although the international fur trade is no longer a significant drain on populations, the Jaguar continues to suffer from persecution as a pest, and the area of suitable habitat is declining.

The small spotted cats have been exploited in the largest numbers of all the species included in this study. Felis guigna and F. jacobita have been of little interest to the international fur trade, although their skins do appear in local trade and have been found in shipments of other species. Skins of F. colocolo appeared in trade for a number of years during the late 1970s and early 1980s. Little is known about populations of this species and the potential effects of harvest, however few skins appear to have been traded after 1981. Of the remaining spotted cat species Felis pardalis was the main species involved in trade until the mid-1970s. Although most sources of information for earlier years include all small spotted cats under the name 'ocelot', trade representatives indicate that the vast majority of the skins in trade were Ocelot skins and that the other small spotted cat skins assumed more importance in trade in the late 1970s as Ocelot skins became more difficult to obtain. Since the late 1970s, F. geoffroyi, F. tigrina and F. wiedii have all been reported in international trade in large numbers. By 1984, F. geoffroyi and F. tigrina skins were traded in the largest numbers. The trade in small spotted cat skins decreased significantly by 1985 compared with the numbers involved in earlier years. Trade controls have apparently taken effect, however trade data for further years are required to confirm the decline.

Source countries

A number of countries were important sources for the cat and otter skins in international trade, the most important having been Brazil, Colombia, Bolivia, Paraguay, Peru and Argentina. Brazil was an important source of skins in the

1960s, and Paraguay was by far the largest source of skins during the late 1970s and early 1980s in spite of its ban on exports. Bolivia apparently exported the largest numbers of small cat skins in the most recent years. However, the lack of effective border controls and the evident ease of laundering skins through countries from which legal, or at least apparently legal, documentation can be obtained, limit the reliability of available trade data for indicating the exact sources of the skins in trade.

Importers

The Federal Republic of Germany replaced the USA as the major importer of cat and otter skins during the early 1970s. Some evidence suggests that the German market for neotropical otter skins has almost disappeared and that the market for spotted cat skins may have declined as a result of fashion trends and changing attitudes to wearing of spotted cat furs.

Legislation

The species covered by this report are fully protected from commercial export in most of their countries of origin, furthermore they are all listed in CITES Appendices I or II. Although some channels do continue to allow trade outside these controls, the mechanism for effective control of the international movements of cat and otter skins does exist. The recent ban on the issuance of permits for imports into the EEC of skins of Felis geoffroyi, F. pardalis, F. tigrina and F. wiedii (Anon., 1987a) effectively cuts the European market off from the only species traded in large numbers in recent years. The effect of this ban has already been illustrated by the refusal of EEC countries to allow the import of 82 500 cat skins legally exported from Argentina in early 1987 (see Legislation section under Argentina in the present report). These skins have been exported from Argentina, but their final destination remains unknown.

General conclusions

Future commercial harvest of spotted cat and otter skins may be seen as acceptable or desirable if carried out on a sustainable basis. Melquist (1984) concluded that such harvest may be feasible for some species but that insufficient population information was available upon which proper regulation of hunting could be based. Information gathered for the present report supports this conclusion. Population information remains inadequate, however indications from trade data show that legislative controls have been effective in reducing the level of trade. This legislative framework will be invaluable in controlling possible future trade. Such trade would require a market to supply, therefore recent trends in the German fashion trade away from spotted cat skin garments and the changes in attitudes to the wearing of fur garments experienced in a number of countries, may not be a good sign for potential future trade. Nevertheless the fashion trade is adaptable and the financial benefits of controlled trade may become crucial to the survival of these species. Trophy hunting has been suggested as an important assurance for the survival of the Jaguar, however like the other species included here, insufficient quantitative data are available to ensure sustainable harvest. A recent report on the status of the Leopard (Panthera pardus) in sub-Saharan Africa (Martin and De Meulenaer, 1987) used population density and rainfall data to estimate the total population size. Furthermore a model was designed to predict the effects of exploitation on the population. Such investigation must be seen as a priority for the Latin American cats and otters before any large scale utilisation is recommenced.

The collection of such population data is obviously a major task; substantial funding will be needed and personnel with extensive experience will be required. In recent years a number of researchers have begun to address the lack of information on Latin American cat and otter populations, such as Claudio Chehebar who has studied otters in Argentina, Alan Rabinowitz who has studied the Jaguar in Belize, Jose Tello who has studied the cats in Bolivia and George Schaller, Peter Cranshaw and Howard Quigley who have studied the Jaguar in the Pantanal of the Mato Grosso, Brazil. The experience gained through such research should be built upon. Such investigations should be conducted within national research programmes wherever possible. The process will inevitably be inhibited by lack of time and money, therefore careful extrapolation of population levels from one area to another will be required.

The harvest and trade data presented are intended to provide a useful historical account of the levels of trade which have been thought to have caused these species generally to decline in numbers. Since other factors, such as habitat destruction and alteration, were also important influences on their populations, and population data remains inadequate, the trade data alone cannot safely be used to indicate sustainable levels of trade for these species. However such information will be a crucial source of reference when calculating potentially sustainable harvest levels in the future, should useful population data become available and such exploitation be seen as desirable.

5. RECOMMENDATIONS

On the basis of the present report and that produced by Melquist (1984), and in light of the findings of the recent study of the status of the Leopard, which was carried out by Martin and De Meulenaer (1987), it is possible to make a number of general recommendations concerning the future conservation of the neotropical spotted cats and otters together with a number of more specific recommendations dealing with their harvest and trade.

As is recommended in the preamble of CITES, 'peoples and States are and should be the best protectors of their own wild fauna and flora'. It is therefore important that:

1. The range states should determine their own objectives and priorities for the conservation of their native cats and otters.

Any proposed conservation measures must be based on agreements between the range states which the Latin American cats and otters inhabit. Such co-operation should be seen as a priority in the future conservation and management of these species. Therefore:

2. Regional strategies for the conservation of the neotropical cats and otters should be produced and endorsed by the range states.

The production of a strategy for the felids has already been identified as a priority for future action in the Manifesto on Cat Conservation which was recently prepared by the IUCN/SSC Cat Specialist Group.

If the future exploitation of some or all of the cat and otter species included in the present report is seen to be a desirable, or even an essential, aspect of their conservation, population data will be urgently required to determine appropriate levels of exploitation. At present, insufficient information is available on the population size and dynamics of any of the Latin American cat and otter species. Therefore:

3. Basic biological and ecological information on the species included in this report should be collected and analysed; priority should be given to those species for which some form of exploitation is identified as an objective.

Baseline information on each species must include, as a minimum, indications of population density, age structure, fecundity, longevity, sex ratio and mortality for populations inhabiting the different habitat types found within the range of each species. In addition information must be compiled on the extent of the different habitat types, rates of habitat destruction and alteration, and estimates of local population sizes. When sufficient baseline population data are available:

4. Comprehensive assessments of population information should be carried out to produce national and global estimates of population levels.
5. Population models should be constructed for each species involved and sustainable harvest levels should be determined for those species whose exploitation is desirable and feasible.

If it is subsequently decided to permit harvest and trade, on-going monitoring and control of the extent and effects of such exploitation should be ensured.

6.
 - a. National export quotas should be established.
 - b. Skin tagging and registration procedures should be initiated.
 - c. Monitoring of the operation of these controls should be ensured by the CITES Secretariat.

Meanwhile:

7. In the absence of baseline population data, present trade controls should be maintained and their enforcement should be improved.

In particular:

- a. Suitable means of improving the enforcement of trade controls in the range states should be investigated.

Such means may include improving public awareness of national legislation and ensuring the provision of adequate resources for and training to enforcement personnel.

- b. The CITES Secretariat should remind the Parties of national legislation in effect in Latin American countries which protects cats and otters.
 - c. Importing countries should ensure adequate enforcement of trade controls and every effort should be made to respect the national legislation in effect in the exporting country before permitting trade in these species.

In the past, major trade problems have arisen because of the manner in which the Latin American cats and otters were listed in the CITES Appendices. Nomenclatural complications regarding Lutra longicaudis have been resolved but the listing of a number of cat species is still confused by the inclusion of certain subspecies in Appendix I (Felis pardalis mearnsi, F.p. mitis, Felis tigrina oncilla, Felis wiedii nicaraguae and F.w. salvinia). In light of the fact that the skins of the various subspecies of small spotted cat are extremely difficult to distinguish and the widely held belief that most of these subspecies would not survive a thorough systematic review:

8. The listings in the CITES Appendices of the neotropical spotted cats and otters should be reviewed.

If such a review concludes that Appendix I listing of these populations should continue, it would seem far more appropriate to list geographically defined populations rather than subspecies. It must be noted that many of the cat and otter species or subspecies currently included in Appendix I, were listed prior to the adoption by CITES Parties of the Berne criteria for the addition of species and other taxa to Appendices I or II (Resolution of the Conference of the Parties Conf. 1.1). Therefore any proposed downlisting to Appendix II may need to follow the procedures detailed by Conf. 5.21, which was adopted at the fifth meeting of the Conference of the Parties held in 1985.

One particular problem which requires urgent attention is the subject of domestic livestock predation by Jaguars. This has been identified as an immediate conflict in a number of countries resulting in widespread and uncontrolled hunting of Jaguars by ranchers. Therefore:

9. The need to control Jaguars because of their predation of domestic livestock should be investigated and possible means of resolving the problem should be identified.

The extent of Jaguar predation on domestic livestock should be quantified. Certain individual countries already have mechanisms for licensing control killing of Jaguar, the effectiveness of which should be studied. Possible solutions may involve controlled hunting or some form of compensation scheme.

REFERENCES

In addition to the following references a number of CITES Notifications are quoted in the text. These are the official Notifications to the Parties issued by the CITES Secretariat, Lausanne, Switzerland.

- Aguilar, W. (1978). El manejo de la Vida Silvestre en Honduras. In: Morales, R., Macfarland, C., Incer, J. and Hobbs, A. (Eds), Memorias de la Primera Reunion Regional Centroamericana sobre Vida Silvestre. Matagalpa, Nicaragua 25-29 Julio 1978. Unidad de areas silvestres y cuencas del catie.
- Anon. (undated). Cuadro de vedas de caza y pesca. Sub Direccion de Pesca y Vida Silvestre, Departamento de Pesca Continental y Vida Silvestre, Publication No. 1.
- Anon. (1963-70). Anuario Estadístico do Brasil, Instituto Brasileiro de Geografia e Estatística.
- Anon. (1976). Conservation. Argentina. Cat Specialist Group Newsletter 2, IUCN Survival Service Commission, Morges, Switzerland, p. 4.
- Anon. (1980a). Multi-million forgeries in fur trade documents uncovered. IUCN/WWF News Release No. 8/80.
- Anon. (1980b). The International Trade in Felidae 1977. In: Convention on International Trade in Endangered Species of Wild Fauna and Flora. Proceedings of the second meeting of the conference of the parties. San José, Costa Rica, 19 to 30 March 1978. Vol.1. Secretariat of the Convention, IUCN, Gland, Switzerland, pp. 264-293.
- Anon. (1980c). The Jaguar. In: Biological Services Program, Selected vertebrate endangered species of the seacoast of the United States. Fish and Wildlife Service, U.S. Department of the Interior, 6 pp.
- Anon. (1980d). The Ocelot. In: Biological Services Program, Selected vertebrate endangered species of the seacoast of the United States. Fish and Wildlife Service, U.S. Department of the Interior.
- Anon. (1981). Mexican wildlife law. Wildlife Newsletter, Land and Resources Division Journal 2(2): 10-12.
- Anon. (1982). Endangered classification extended to ocelot in the United States, Endangered Species Technical Bulletin 7(8): 1.
- Anon. (1984a). Evaluation and development of wildlife resources, Trinidad and Tobago. Project findings and recommendations, UNDP, FAO, 22 pp.
- Anon. (1984b). Jaguar research in Belize. Belize Audubon Society Bulletin 16(6): 1-2.
- Anon. (1986a). Belize in CITES. Traffic Bulletin 8(3): 2.
- Anon. (1986b). Skins seized in Uruguay. Traffic Bulletin 8(2): 32.
- Anon. (1987a). EEC import restrictions. Traffic Bulletin 8(4): 57-58.
- Anon. (1987b). Cat skins refused in Europe. Traffic Bulletin 9(1): 2.
- Bacon, P.R. and French, R.P. (1972). The wildlife sanctuaries of Trinidad and Tobago. Wildlife Conservation Committee, Ministry of Agriculture Lands and Fisheries, 78 pp.
- Baker, H.R. (1974). Records of mammals from Ecuador. Pubns. of Michigan State University Museum 5(2): 1-142.
- Barquero, J.I. (1976). La vida silvestre en Nicaragua. Encuentro. Revista de la Universidad Centroamericana. October/December, Managua, Nicaragua, pp. 57-66.
- Bohlen, J. (1987). Jaguars: Why protect a killer? International Wildlife 17(2): 4-11.
- Brack-Egg, A. (1978). Situación actual de las nutrias (Lutrinae, Mustelidae) en el Perú. In: Duplaix, N. (Ed.). Otters. Proceedings of the first working meeting of the IUCN/SSC Otter Specialist Group, Paramaribo, Suriname 27-29 March 1977, IUCN, Morges, Switzerland, pp. 76-84.
- Burton, J.A. (1976). Wildlife imports in Britain 1975. Oryx 13(4): 330-331.

- Cabello, C.C. (1978). La nutria de Mar (Lutra felina) en la Isla de Chiloe, Chile. In: Duplaix, N. (Ed.). Otters. Proceedings of the first working meeting of the IUCN/SSC Otter Specialist Group, Paramaribo, Suriname 27-29 March 1977. IUCN, Morges, Switzerland, pp.108-118.
- Cabello, C.C. (1985). Final report. Marine otter, Chiloe, Chile. WWF/IUCN project 1409, ANCUD, 68 pp.
- Cabrera, A. (1957). Catalogo de los mamíferos de America del sur, vol. I. Metatheria, Unguiculata, Carnivora. Revista del Museo Argentino de Ciencias Naturales 'Bernardino Rivadavia', Ciencias Zoológicas 4(1): 1-307.
- Caldwell, J.R. (1984). South American cats in trade: the German connection. Traffic Bulletin 6(2): 31-32.
- Ceballos, G. and Navarro, L. (in prep.). Endangered mammals of Mexico. In: Ceballos, G. and Navarro, L. (Eds.). The endangered and extinct vertebrates in Mexico.
- Chehebar, C.E., Gallur, A., Giannico, G., Gottelli, M.D. and Yorrio, P. (1986). A survey of the Southern River Otter Lutra provocax in Lanin, Puelo and Los Alerces National Parks, Argentina, and evaluation of its conservation status. Biological Conservation 38(4): 293-304.
- Cranshaw, P.G. (1986). The prospects for jaguar conservation in Brazil. Paper presented at the Symposium on the conservation status of the jaguar; wildlife management in neotropical moist forest, Manaus, Brazil, 4 April 1986, CIC.
- Cunha Vieira, C. da (1955). Lista remissiva dos mamíferos do Brasil. Arquivos de Zoologia do Estado de São Paulo 8(2): 341-474.
- Domalain, J.-Y. (1977). Confessions of an animal trafficker. Natural History 86(5): 54-66.
- Donadio, A. (1978). Some comments on otter trade and legislation in Colombia. In: Duplaix, N. (Ed.). Otters. Proceedings of the first working meeting of the IUCN/SSC Otter Specialist Group, Paramaribo, Suriname 27-29 March 1977. IUCN, Morges, Switzerland, pp. 34-42.
- Doughty, R.W. and Myers, N. (1971). Notes on the Amazon wildlife trade. Biological Conservation 3(4): 293-297.
- Duarte, J.C.S. and Rebelo, G.H. (1985). Carnivore skins held in Brazil. Traffic Bulletin 7(1): 16-17.
- Duplaix, N. (Ed.) (1978a). Otters. Proceedings of the first working meeting of the IUCN/SSC Otter Specialist Group, Paramaribo, Suriname 27-29 March 1977. IUCN, Morges, Switzerland, 158 pp.
- Duplaix, N. (1978b). Synopsis of the status and ecology of the giant otter in Suriname. In: Duplaix, N. (Ed.). Otters. Proceedings of the first working meeting of the IUCN/SSC Otter Specialist Group, Paramaribo, Suriname 27-29 March 1977. IUCN, Morges, Switzerland, pp. 48-54.
- Duplaix, N. (1980). Observations on the ecology and behavior of the giant river otter Pteronura brasiliensis in Suriname. Rev. Ecol. (Terre Vie) 34: 495-620.
- Ellis, D.H. (1979). Report of the 1979 Institute for Raptor Studies jaguar survey expedition to South America. Unpublished Report.
- Emmons, L.H. (1987). Jungle cruisers. Animal Kingdom 90(1): 22-30.
- Florence, A. (1986). Small emerald, uncut. BBC Wildlife 4(4): 174-178.
- Foote, R.W. and Scheuerman, R.G. (1973). Reptilian and mammalian hides exported from Leticia, Amazonas, Colombia during 1972 and January, February and March of 1973. Unpublished report, 6 pp.
- Fuller, K.S. and Swift, B. (1985). Latin American wildlife trade laws, World Wildlife Fund - U.S., CITES Secretariat, 392 pp.
- García-Mata, R. (1978). Nota sobre el status de Lutra provocax en la Argentina. In: Duplaix, N. (Ed.). Otters. Proceedings of the first working meeting of the IUCN/SSC Otter Specialist Group, Paramaribo, Suriname 27-29 March 1977. IUCN, Morges, Switzerland, pp. 68-74.

- Goldman, E.A. (1920). Mammals of Panama. Smithsonian Miscellaneous Collection 69(5): 1-309.
- Goldman, E.A. (1943). The races of the ocelot and margay in Middle America. Journal of Mammalogy 24 (1): 372-385.
- Grimwood, I.R. (1969). Notes on the distribution and status of some Peruvian mammals, 1968. Special Publication No. 21 American Committee for International Wildlife Protection and New York Zoological Society, Bronx, New York. 86 pp.
- Guggisberg, C.A.W. (1975). Wild cats of the world, David and Charles, London, 328 pp.
- Hall, E.R. (1981). The mammals of North America, 2nd edition. 2 vols. Wiley, New York, 1358 pp.
- Handley, C.O. (1976). Mammals of the Smithsonian Venezuelan project. Brigham Young Univ. Sci. Bull. Biol. Ser. 20 (5): 1-89.
- Hoogesteijn, R., Mondolfi, E. and Michelangeli, A. (1986). Observaciones sobre el estado de las poblaciones y las medidas para la conservacion del Jaguar en Venezuela. In: Wildlife management in neotropical moist forest. Proceedings of an International Symposium, Manaus, Brazil, International Council for Game and Wildlife Conservation (CIC) and International Foundation for the Conservation of Game (IFCG), Paris, France, pp. 30-75.
- Inskipp, T. and Wells, S. (1979). International trade in wildlife. Earthscan, IIED, London, 104 pp.
- Iriarte, J.A. and Jaksic, F.M. (1986). The fur trade in Chile: An overview of seventy-five years of export data (1910-1984). Biological Conservation 38(3): 243-253.
- James, C. (1983). Game mammals and hunting. In: James, C. (Ed). Highlighting wildlife. Basic information on wildlife conservation in Trinidad and Tobago. Forestry Division, Ministry of Agriculture, Lands and Food Production, Trinidad and Tobago, pp. 57-60.
- Koford, C. (1973a). Project 694. Status survey of jaguar and ocelot in tropical America. World Wildlife Yearbook 1972-73, pp. 215-219.
- Koford, C.B. (1973b). Spotted cats in Latin America: an interim report. Oryx 12(1): 37-39.
- Koford, C.B. (1974). Project 694. Jaguar and ocelot in tropical America - status survey. World Wildlife Yearbook 1973-74, pp. 264-266.
- Koford, C.B. (1975). Felids of Latin America: Importance and Future Prospects. In: Symposium on 'Wildlife and its Environments in the Americas' June 25th 1973. Publicaciones Biologicas Instituto de Investigaciones Cientificas O.A.N.L. Vol 1. No.7, Julio 10 1975.
- Laidler, E. (1979). Giant otter expedition to Guyana. Unpublished preliminary report, 8 pp.
- Leopold, A.S. (1959). Wildlife of Mexico. University of California Press, Berkeley and Los Angeles.
- Lopez, E. (1978). Informe Sobre las actividades de la Direccion General de Recursos Pesqueros y vida silvestre de Costa Rica. In: Morales, R., Macfarland, C., Incer, J. and Hobbs, A. (Eds), Memorias de la Primera Reunion Regional Centroamericana sobre Vida Silvestre. Matagalpa, Nicaragua 25-29 Julio 1978. Unidad de areas silvestres y cuencas del catie, pp. 89-95.
- McGrath, D.G. (1986). The animal products trade in the Brazilian Amazon, Unpublished report to World Wildlife Fund-U.S., 38 pp.
- McMahan, L. (1983). Cat skin trade shifts to smaller species. TRAFFIC (U.S.A.) 5(2): 3/5.
- McMahan, L. (in press). The international cat trade. In: Miller, S.D. and Everett, D.D. (Eds), Cats of the world: biology, conservation and managment. Proceedings of the Second International Cat Symposium, October 4-6, 1982, Texas A & I University, Kingsville, Texas.
- McVay, C. (1986). Spot those skins. Traffic (U.S.A.) 6(4): 8-9.

- Mares, M.A. and Ojeda, R.A. (1984). Faunal commercialization and conservation in South America. BioScience 34(9): 580-584.
- Mares, M.A., Ojeda, R.A. and Kosco, M.P. (1981). Observations on the distribution and ecology of the mammals of Salta Province, Argentina. Annals of the Carnegie Museum 50: 151-206.
- Martin, R.B. and De Meulenaer, T. (1987). Survey of the status of the Leopard (Panthera pardus) in sub-Saharan Africa. Report to the CITES Secretariat, 105 pp.
- Melendres, A.P. (1978). Notas sobre las Nutrias de Rio del Ecuador. In: Duplaix, N. (Ed.). Otters. Proceedings of the first working meeting of the IUCN/SSC Otter Specialist Group, Paramaribo, Suriname 27-29 March 1977. IUCN, Morges, Switzerland, pp. 56-66.
- Melquist, W.E. (1984). Status survey of otters (Lutrinae) and spotted cats (Felidae) in Latin America. Unpublished report to IUCN, Gland, Switzerland, 269 pp.
- Mena Moya, R.A. (1978). Fauna y caza en Costa Rica. R.M. Costa Rica, 255 pp.
- Miller, S.D., Rottmann, J., Raedeke, K.J. and Taber, R.D. (1983). Endangered mammals of Chile: status and conservation. Biological Conservation 25: 335-352.
- Mondolfi, E. (1976). Fauna silvestre de los bosques humedos de Venezuela. Asociacion Nacional Para la Defensa de la Naturaleza, Venezuela.
- Mondolfi, E. and Trebbau, P. (1978). Distribution and status of the giant otter (Pteronura brasiliensis) in Venezuela. In: Duplaix, N. (Ed.). Otters. Proceedings of the first working meeting of the IUCN/SSC Otter Specialist Group, Paramaribo, Suriname 27-29 March 1977. IUCN, Morges, Switzerland, pp. 44-47.
- Myers, N. (1973). The spotted cats and the fur trade. In: Eaton, R.L. (Ed.) The world's cats. Volume 1. Proceedings of an international symposium held at Lion Country Safari, Laguna Hills, California on March 15-17, 1971. pp. 276-326.
- Navarro, D. (1985). Status and distribution of the ocelot (Felis pardalis) in South Texas. Unpublished MSc Thesis for Texas A & I University.
- Ojeda, R.A. and Mares, M.A. (1982). Conservation of South American mammals: Argentina as a paradigm. In: Mares, M.A. and Genoways, H.H. (Eds). Mammalian biology in South America. Pymatuning Laboratory of Ecology, Spec. Publ. No. 6, Linesville, PA., USA, pp. 505-521.
- Pacheco, T. (1983). Efectos positivos y negativos de la veda de caza de 1973 en la Amazonia Peruana. Report for the Universidad Nacional Agraria la Molina, Lima, Peru, 45 pp.
- Paradiso, J.L. (1972). Status report on cats (Felidae) of the world, 1971. Special Scientific Report Wildlife No. 157, U.S. Department of the Interior, Fish and Wildlife Service, Bureau of Sport Fisheries and Wildlife, Washington, D.C., 43 pp.
- Pine, R.H., Miller, S.D. and Schamberger, M.L. (1979). Contributions to the mammology of Chile. Mammalia 43: 339-376.
- Pyke, W.S.H. (1983). Historical review of conservation laws of Trinidad and Tobago. In: James, C. (Ed). Highlighting wildlife. Basic information on wildlife conservation in Trinidad and Tobago. Forestry Division, Ministry of Agriculture, Lands and Food Production, Trinidad and Tobago, pp. 16-18.
- Ramos, M.A. (1986). Mexico: Caught in a labyrinth of natural resource problems. Traffic (U.S.A.) 6(4): 5/9.
- Salas, J.B. (1978). Informe sobre las actividades que desarrolla el Departamento de Vida silvestre en Nicaragua. In: Morales, R., Macfarland, C., Incer, J. and Hobbs, A. (Eds), Memorias de la Primera Reunion Regional Centroamericana sobre Vida Silvestre. Matagalpa, Nicaragua 25-29 Julio 1978. Unidad de areas silvestres y cuencas del catie, pp. 99-108.

- Sanborn, C.C. (1929). The land mammals of Uruguay. Zoological Series, Field Museum of Natural History Publication 265, 17(4): 147-165.
- Saunders, G.B., Holloway, A.D. and Handley, C.O. (1950). A Fish and Wildlife survey of Guatemala. U.S. Dept. Interior, Fish and Wildlife Service, Spec. Scient. Rep. Wild. No.5.
- Serrano, F. (1978). Informe de actividades de la Unidad de Parques Nacionales y Vida Silvestre en El Salvador. In: Morales, R., Macfarland, C., Incer, J. and Hobbs, A. (Eds), Memorias de la Primera Reunion Regional Centroamericana sobre Vida Silvestre. Matagalpa, Nicaragua 25-29 Julio 1978. Unidad de areas silvestres y cuencas del catie, pp. 118-124.
- Smith, N.J.H. (1976). Spotted cats and the Amazon skin trade. Oryx 13(4): 362-371.
- Smith, N.J.H. (1978). Human exploitation of terra firme fauna in Amazonia. Ciencia e Cultura 30(1): 17-23.
- Smith, N.J.H. (1981). Caimans, capybaras, otters, manatees and man in Amazonia. Biological Conservation 19: 177-187.
- Taber, R. (1974). Endangered wildlife of Chile. World Wildlife Fund Yearbook 1973-74, pp. 247-251.
- Terborgh, J.W., Fitzpatrick, J.W. and Emmons, L. (1984). Annotated checklist of bird and mammal species of Cocha Cashu biological station, Manu National Park, Peru. Fieldiana Zoology New Series, Number 21: 1-29.
- Thornback, J. and Jenkins, M. (1982). The IUCN Mammal Red Data Book, Part 1. IUCN, Gland, Switzerland, 516 pp.
- Vallester, E. (1978). Informe de Panama sobre la situacion de la Fauna Silvestre. In: Morales, R., Macfarland, C., Incer, J. and Hobbs, A. (Eds), Memorias de la Primera Reunion Regional Centroamericana sobre Vida Silvestre. Matagalpa, Nicaragua 25-29 Julio 1978. Unidad de areas silvestres y cuencas del catie, pp. 43-64.
- Vaughan, C. (1983). A report on dense forest habitat for endangered wildlife species in Costa Rica. United States Department of the Interior and the National University, Heredia, Costa Rica, 99 pp.
- Villalba-Macias, J.S. (1986). French Guiana. TRAFFIC (South America), Montevideo, Uruguay, Unpublished report.
- Wetzel, R.M. and Lovett, J.W. (1974). A collection of mammals from the Chaco of Paraguay. The University of Connecticut Occasional Papers Biological Science Series 2(13): 203-216.
- Weyer, D. (1982). Preliminary jaguar survey: Belize. Unpublished report.
- Ximenez, A. (1970). Notas sobre félidos neotropicales, I. Felis colocolo braccata y sus relaciones con Felis colocolo munoai y Felis colocolo pajeros. Comunicaciones Zoologicas del Museo de Historia Natural de Montivideo 10(130): 1-7.
- Ximenez, A. (1973). Notas sobre félidos neotropicales, III. Contribucion al conocimiento de Felis geoffroyi D'Orbigny and Gervais, 1844 y sus formas geograficas (Mammalia, Felidae). Papéis Avulsos de Zoologia, Sao Paulo 27(3): 31-43.
- Ximenez, A. (1975). Felis geoffroyi. Mammalian Species 54: 1-4. American Society of Mammologists.
- Ximenez, A., Langguth, A. and Praderi, R. (1972). Lista sistematica de los mamiferos del Uruguay. Anales Mus. Nac. Hist. Nat. Montevideo 7 (5): 1-49.
- Zawisza, T. (1984). Guia ecologica de la fauna de Venezuela, Caracas.
- Zyll de Jong, C.G. van (1972). A systematic review of the nearctic and neotropical river otters (genus Lutra). Contributions of the Life Sciences Division of the Royal Ontario Museum 80: 1-104.

APPENDIX A

CITES annual report data

Explanation

All of the Latin American spotted cats and otters have been listed in the CITES Appendices (see history of listing on following page), therefore the annual reports of CITES Parties should contain details of their trade. Various problems impair the value of such reports for assessing world trade. For example: not all trading nations are CITES Parties; not all CITES Parties produce annual reports; and the reports of those that do, vary in quality and regularity of submission. Some countries may report the number of specimens covered by the permits issued, while others report the actual number for which the permit was used. These factors and others have to be taken into account when analysing data from CITES reports, but generally these reports are of great value in assessing approximate levels of legal trade, the geographic patterns in such trade and the trends in volume and commodity preference over time.

In the following tables CITES annual report data are detailed for each species and for higher taxa (Felidae and Lutrinae). Generally data for 1976 to 1985 are tabulated, but where no trade was reported for a number of years they may be omitted from the table and, in the case of some species, few data have been reported so their trade has not been tabulated. The 1985 data are somewhat incomplete as the annual report for that year from the USA and a number of other countries were unavailable at the time that the tabulations were compiled. However the USA, although the reporter of the largest number of wildlife trade transactions to CITES in most years, is not known to have been involved in significant trade in the species covered by this report in recent years and therefore the data are unlikely to be seriously compromised. In most cases, skins are the only commodity tabulated since trade in live animals and other products was negligible. In the few cases where other commodities are included, any abbreviation used has been explained below the table.

The data have been extracted from a computerised database, operated by the Wildlife Trade Monitoring Unit for the CITES Secretariat, which includes all of the records included in the annual reports of CITES Parties. The data were extracted so that both reported exports and reported imports are indicated for each taxon. Where both importer and exporter have reported the same transaction only one of the records was used to avoid double-counting. It is important to be aware that a figure for exports of skins from a country may be derived, sometimes entirely, from the records of importing countries. Similarly, in some cases, our estimate of a country's imports may be compiled largely from the reports of exports to that country by other Parties.

The trade involving each species for which sufficient data had been reported is summarised in two tables. Table 1 shows the net imports of all importing countries. The total of the net imports can be used as an estimate of the minimum volume of world trade. Table 2 shows the origin, or where no origin is given, the exporter, of the reported transactions. When skins have been exported to an intermediate country and subsequently re-exported, the minimum net trade was calculated, ensuring that the numbers were only recorded once. The table therefore shows, for each year, the minimum number of specimens in trade from each country of origin. The figures in parentheses show, for countries with wild populations of the species, the number of specimens reported by CITES Parties in direct trade from each country, in order to distinguish such trade from transactions where the country was reported as the original source, but not the exporter.

History of the listing of Latin American cats and otters
in the CITES Appendices.

The following table summarises the history of the listing in the CITES Appendices of the species included in this report. Where the date of the entry into force of a listing is in parentheses, that listing has been superseded by a subsequent addition to the Appendices. Some of the species listed in Appendix II have subspecies which are, or have been, included in Appendix I and are therefore excluded from the Appendix II listing.

Species	Appendix	Date of listing day/month/year
<u>Lutrinae</u>		
<u>Lutra felina</u>	I	01/07/75
<u>Lutra longicaudis</u> ¹	I	29/07/83
<u>Lutra longicaudis</u> ²	II	[04/02/77]
<u>Lutra longicaudis</u> ³	I	[01/07/75]
<u>Lutra provocax</u>	I	01/07/75
<u>Pteronura brasiliensis</u>	I	01/07/75
<u>Felidae</u>		
<u>Felis colocolo</u>	II	04/02/77
(<u>budinii</u>)	II	[01/07/75]
(<u>crespoi</u>)	II	[01/07/75]
(<u>pajeros</u>)	II	[01/07/75]
<u>Felis geoffroyi</u>	II	04/02/77
<u>Felis guigna</u>	II	04/02/77
<u>Felis jacobita</u>	I	01/07/75
<u>Felis pardalis</u>	II	01/07/75
(<u>mearnsi</u>)	I	01/07/75
(<u>mitis</u>)	I	01/07/75
<u>Felis tigrina</u>	II	01/07/75
(<u>oncilla</u>)	I	01/07/75
<u>Felis wiedii</u>	II	01/07/75
(<u>nicaraguae</u>)	I	01/07/75
(<u>salvinia</u>)	I	01/07/75
<u>Panthera onca</u>	I	01/07/75

Notes

The following changes to the listing status of Lutra longicaudis were caused by changes to the nomenclature adopted by the Parties to CITES.

1. Includes synonyms Lutra annectens, L. enudris, L. incarum and L. platensis.
2. Subspecies/Species not listed in note 3 were included in the listing of Lutrinae spp.
3. Only L. platensis and L. annectens were listed in 1975.

LUTRINAE

Lutrinae spp.

Table 1 Net imports

	1976	1977	1978	1979*	1980	1981	1982	1983	1984	1985
Austria	-	30	262	-	-	-	-	-	-	-
Belgium	-	730	-	-	-	-	-	1 body	-	-
F.R. Germany	-	15077 (13440)	22967	20	-	-	-	-	-	-
Greece	-	38	-	-	-	-	-	-	-	-
Japan	-	-	-	-	-	-	1	-	-	-
Sweden	-	-	-	26	-	-	-	-	-	-
Switzerland	-	116	59	-	-	-	-	-	-	-
USA	-	12	243	-	-	-	-	-	4	-
Total		16003	23531	46	-	-	1	1 body	4	-

* - In addition, Denmark reported the import of 1606 skins from F.R. Germany (origin Paraguay) and the export of 1626 skins to F.R. Germany (origin unknown).

Lutrinae spp. (continued)

Table 2 Original source

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Latin American countries having or possibly having populations of Lutrinae										
Argentina	-	73 (73)	1 (1)	-	-	-	-	-	-	-
Belize	-	39 (39)	54 (54)	-	-	-	-	-	-	-
Bolivia	-	-	1374 (1374)	-	-	-	-	-	-	-
Mexico	-	-	162 (162)	-	-	-	-	-	-	-
Panama	-	101 (101)	389 (389)	-	-	-	-	-	-	-
Paraguay	-	8349 (8349)	17273 (17273)	1626 (20)	-	-	-	-	-	-
Peru	-	4411 (4411)	4006 (4006)	-	-	-	-	-	-	-
Other countries										
Austria	-	681	-	-	-	-	-	-	-	-
Belgium	-	-	20	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	4	-
France	-	-	12	-	-	-	1	-	-	-
Italy	-	-	272	-	-	-	-	-	-	-
UK	-	2337	-	-	-	-	-	-	-	-
Unknown	-	12	-	1652	-	-	-	1 body	-	-

Lutra felina

Listed in CITES Appendix I since 1975. The only trade reported in this species by CITES Parties was one transaction involving one garment reportedly imported into the USA from Denmark in 1983. This garment was described as having been seized on entry into the US.

Lutra longicaudis

Table 1 - Net imports

No trade in this species was reported in 1975 or 1976.

	1977	1978	1979	1980	1981	1982	1983	1984	1985
Austria	40	-	262	358	79	-	499	131	-
Belgium	30	-	-	-	527	804	22	-	-
Czechoslovakia	-	-	647	776	-	-	-	-	-
F.R. Germany	1637	-	17630	35080	19307	4244	-	-	-
Greece	-	-	1232	685	-	-	-	-	-
Italy	-	-	40	-	-	-	-	-	-
Netherlands	-	-	471	187	-	-	-	-	-
Norway	-	-	-	-	1 body	-	-	-	-
Spain	-	-	-	-	12	-	-	-	-
Switzerland	-	-	-	240	-	-	-	26	-
Unknown	-	-	3557	117	-	14	6	-	-
USA	-	-	-	-	1 body	4	-	-	-
Total:	<u>1707</u>	<u>0</u>	<u>23839</u>	<u>37443</u>	<u>19925</u>	<u>5066</u>	<u>527</u>	<u>157</u>	-
					2 bodies				

Lutra longicaudis (continued)

Table 2 - Original source No trade reported in 1975 or 1976

	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Countries having or possibly having wild populations of <i>L. longicaudis</i></u>									
Argentina	-	-	-	-	877	-	-	-	-
Belize	-	-	22 (22)	-	(0)	-	-	-	-
Bolivia	-	-	40 (0)	24 (0)	-	-	-	-	-
Colombia	-	-	60 (0)	-	-	-	-	-	-
Honduras	-	-	639 (639)	-	-	-	-	-	-
Mexico	-	-	308 (0)	-	-	-	-	-	-
Panama	-	-	448 (448)	276 (0)	-	-	-	-	-
Paraguay	-	-	20416 (20416)	36795 (32070)	4872 (0)	5063 (0)	527 (0)	157 (0)	-
Peru	-	-	2314 (2314)	500 (0)	1 body (0)	-	-	-	-
Suriname	-	-	-	-	1 body (1 body)	-	-	-	-
South America	-	-	-	117 (0)	-	-	-	-	-
<u>Countries without wild populations of <i>L. longicaudis</i></u>									
Austria	-	-	511	-	-	-	-	-	-
Unknown	1707	0	-	-	14176	4	-	-	-

Lutra provocax

Trade has been reported as follows:

- 1983 3 garments reported to have been imported by the USA from Canada.
- 1984 2 garments imported by the USA from Argentina (seized on entry).
- 902 skins reported by the USA to have been exported to the Federal Republic of Germany for commercial purposes.

No trade was reported for any other year between 1975 and 1985.

Pteronura brasiliensis

Trade has been reported as follows:

1975, 1976, 1977 - No trade reported
1978 - 1 live animal exported from F.R. Germany (origin Venezuela) to Spain
1979 - No trade reported
1980 - 1 skin exported from New Zealand to Canada

1981 - Net importers (no. of skins):

Canada	2
F.R. Germany	1000 (1)
USA	5

Primary exporters:

Brazil	1 (1)
Paraguay	1000 (1) (0)
New Zealand	1
Unknown	5

(1 = exported from Italy under 'uncertain circumstances')

1982 - 1 skin exported from the USA to an unknown destination
1983 - No trade reported
1984 - 1 skin exported from the USA to an unknown destination
1985 - No trade reported

FELIDAE

Felidae spp.

The following trade in Felidae spp. was reported by the Federal Republic of Germany in 1977 and 1978.

	1977	1978
Argentina	1826	25269
Belize	43	-
Bolivia	-	210
Panama	64	-
Paraguay	1000	123807
<u>TOTAL</u>	<u>2933</u>	<u>149286</u>

Felis colocolo

Table 1 Net imports

No trade reported in 1975, 1976 or 1985. The 361 skins indicated in parentheses were reportedly re exported from France to F.R. Germany and then apparently returned to France in the same year. (pla. - skin plate, bod. - body)

	1977	1978	1979	1980	1981	1982	1983	1984
Belgium	-	-	-	-	-	-	1 bod.	-
F.R. Germany	-	19	-	9150	4296	-	(361)	-
France	-	-	-	-	-	-	(361)	-
Spain	-	-	1364	1240	-	11 pla.	-	-
Switzerland	-	-	2	649	2	42 + 24 bod.	-	-
UK	-	-	1364	-	-	-	-	-
USA	-	-	-	7	1	-	-	-
<u>Total</u>	-	<u>19</u>	<u>2730</u>	<u>11046</u>	<u>4299</u>	<u>42</u>	<u>361</u>	
	-	-	-	-	-	<u>11 pla.</u>		
	-	-	-	-	-	<u>24 bod.</u>	<u>1 bod.</u>	

Felis colocolo (continued)

Table 2 Original source

No trade reported for 1975, 1976 or 1985

Figures represent numbers of skins unless otherwise stated.
(pla. - skin plate, bod. - body)

	1977	1978	1979	1980	1981	1982	1983	1984
<u>Countries with wild populations of Felis colocolo</u>								
Argentina	-	19 (19)	948 (948)	2180 (2132)	3866 (3866)	42 + 11 pla (0)	1 bod. (0)	-
Bolivia	-	-	-	7 (7)	-	-	-	-
Paraguay	-	-	2728 (0)	8201 (8201)	433 (433)	-	-	-
Uruguay	-	-	-	10 (0)	-	-	-	-
<u>Countries without wild populations of Felis colocolo</u>								
Canada	-	-	2	648	-	-	-	-
Unknown	-	-	-	1388	2	24 bod.	-	-

Table 1 Net imports

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Argentina	-	-	-	-	-	3491	-	-	-	-
Austria	-	146	73	933	79	237	318	331	66	67
Belgium	-	-	-	1041	2327	-	79	-	1000	-
Cyprus	-	-	-	-	-	-	22	-	-	-
Denmark	-	-	71	4	-	-	-	-	-	-
F.R. Germany	174	6176	30432	58428	51612	76802	15874	77605	3544	-
Finland	-	-	-	-	-	-	-	10	-	-
France	-	-	-	38	5	-	-	-	14844	1683
German D.R.	-	-	6	-	-	-	-	-	-	-
Greece	-	-	-	6469	3819	-	5412	-	-	-
Hong Kong	-	88	-	300	-	-	-	-	-	-
Italy	-	259	-	-	6470	2861	32	-	2365	-
Japan	-	-	1921	-	-	-	-	1	-	-
	-	-	-	-	-	-	-	-	363 kg	-
Luxembourg	-	-	-	-	-	-	32	-	-	-
Malta	-	-	-	-	7	-	-	-	-	-
Monaco	-	-	-	-	-	-	-	25	-	-
Netherlands	-	-	1	75	-	-	-	2	-	-
Singapore	-	-	-	-	-	-	-	1	-	-
Spain	-	290	-	540	424	908	761	302	653	-
Switzerland	-	178	184	50	-	-	-	-	-	1
UK	-	-	9704	2241	1871	-	-	-	-	-
	-	-	250	49	1	601	3	1	1	-
USA	-	-	42,642	70,168	66,615	84,900	22,533	78,278	22,836	-
	174	7,137	-	-	-	-	-	-	-	-
Total	174	7137	42642	70168	66615	84900	22533	78278	22473	1751
									+ 363 kg	

Table 2 Original source

Felis geoffroyi (continued)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Countries with wild populations of <i>Felis geoffroyi</i></u>										
Argentina	174 (0)	3582 (3582)	15435 (15196)	15624 (15620)	8124 (7351)	1233 (1233)	3126 (1)	8 (8)	2024 (0)	-
Bolivia	-	-	-	-	-	1 (1)	-	3310 (3310)	13844 (13844)	1751 (1683)
Paraguay	-	2100	14532	54095	58767	81871	21137	84921	4500 and 363 kg (363 kg)	-
South America	-	(2100)	(14532) 12500 (0)	(54095) 54 (0)	(58667)	(72725)	(8500)	(3000)	-	-
<u>Countries without wild populations of <i>Felis geoffroyi</i></u>										
Australia	-	-	54	-	-	-	-	-	-	-
Belgium	-	1950	-	-	-	-	-	-	-	-
Belize	-	-	-	16	-	-	2	-	-	-
Canada	-	610	269	280	151	10	-	-	-	-
F.R. Germany	-	92	-	50	349	14	-	-	-	-
France	-	-	1536	-	28	-	-	-	-	-
Nicaragua	-	-	-	-	-	-	-	1	-	-
South Africa	-	-	-	100	-	-	-	-	-	-
UK	-	1286	-	-	-	2079	-	-	-	-
USA	-	-	-	-	-	-	-	-	1000	-
Unknown	-	283	2557	91	1388	1633	843	10130	4319	-

Felis guigna

The only trade reported involving this species was the import into the USA in 1980 of five scientific specimens from the Federal Republic of Germany, origin Chile.

Felis jacobita

Trade in this species has been reported in two years.

1976

84 skins imported into Spain from the United Kingdom,
origin South America.

1977

One trophy imported into the Federal Republic of Germany
from Afghanistan.

Felis pardalis

Table 1 Net imports

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Argentina	-	-	-	-	300	-	-	-	-	-
Australia	84	21	-	-	-	1	-	-	-	-
Austria	616	547	619	60	1851	843	150	62	11	16
Belgium	1674	242	-	-	4887	59	17	95	-	-
Brazil	-	-	-	-	28	-	-	-	-	-
Canada	-	-	2841	-	-	72	140	301	111	-
China	-	-	12	-	-	-	54	-	-	-
Czechoslovakia	3000	-	-	-	-	-	-	-	-	-
Denmark	498	223	631	1106	574	-	-	2	-	-
F.R. Germany	2162	15702	21330	15020	16418	7885	7941	67281	-	-
Finland	-	-	-	-	24	-	14	-	1	-
France	35	12	59	1	48	14	-	-	4100	-
German, D.R.	-	-	1084	-	-	-	-	-	-	-
Greece	17	-	90	40	202	-	-	-	-	-
Hong Kong	178	269	1437	378	180	108	416	395	-	140
Ireland	-	-	-	2	4	4	-	-	-	-
Israel	40	140	128	172	140	12	68	24	124	-
Italy	2220	793	2454	49	4680	4639	657	593	-	195
Japan	326	140	272	67	98	587	84	40	5	120
Lebanon	-	-	-	-	-	-	26	-	-	-
Liechtenstein	-	-	-	-	765	-	-	-	-	-
Luxembourg	-	-	-	16	-	98	12	12	-	-
Mexico	-	-	-	-	39	-	-	-	-	-
Netherlands	14	12	331	7	59	-	-	-	-	-
Norway	219	114	81	-	-	29	14	-	-	-
Paraguay	48	-	-	-	-	-	-	-	-	-
Portugal	-	-	8	-	-	-	-	-	-	-
St Lucia	-	-	-	-	-	-	-	-	-	-
Spain	1748	1113	1450	129	227	3292	-	2	2	-
Switzerland	82	-	378	-	-	-	-	201	14	-
Turkey	30	14	-	-	-	-	-	128	99	-
UK	-	-	1316	-	-	-	-	41	18	26
USA	-	-	-	-	39	87	77	117	89	-
Unknown	-	-	-	41	-	-	-	-	-	58
<u>Total</u>	<u>12986</u>	<u>19342</u>	<u>34521</u>	<u>17088</u>	<u>30563</u>	<u>17730</u>	<u>9676</u>	<u>69294</u>	<u>4574</u>	<u>556</u>

Table 2 Original source

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Countries with wild populations of <i>Felis pardalis</i></u>										
Argentina	605 (605)		534 (488)	-	47 (0)	1 (0)	1 (0)	-	-	-
Belize		62 (62)	408 (408)	107 (107)	181 (181)	-	68 (1)	28 (2)	1 (1)	-
Bolivia		-	240 (0)	-	-	2 (2)	-	4 (4)	1500 (1500)	-
Brazil	6059 (1477)	1491 (1491)	1465 (0)	36 (0)	-	114 (2)	50 (0)	10 (0)	-	-
Colombia	1119 (0)	264 (264)	-	-	6 (6)	15 (15)	12 (12)	13 (9)	1 (1)	-
Costa Rica	-	-	-	-	1 (1)	-	-	-	-	-
Ecuador	-	-	195 (195)	-	3 (3)	8 (7)	23 (21)	3 (2)	3 (1)	-
El Salvador	-	-	-	-	-	1 (1)	-	-	-	-
Guatemala	-	-	-	-	1 (1)	-	-	-	1 (1)	-
Guyana	-	-	-	-	-	1 (1)	-	1 (1)	-	-
Honduras	25 (25)	17 (17)	699 (117)	261 (261)	15 (1)	3 (3)	2 (2)	2 (2)	2 (2)	-
Mexico	418 (418)	-	1195 (54)	-	2 (2)	15 (3)	14 (0)	6 (4)	3 (2)	-
Nicaragua	-	-	-	-	-	2 (2)	7 (7)	-	1 (1)	-
Panama	-	178 (178)	-	213 (30)	2765 (2765)	-	-	3 (1)	-	-

Table 2 (continued)

Felis pardalis (continued)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Countries with wild populations of <u>Felis pardalis</u> (continued)</u>										
Paraguay	693 (0)	3255 (3241)	11845 (11845)	9081 (9081)	25390 (25390)	17069 (9414)	9370 (3199)	68928 (2500)	2741 (2600)	315 (0)
Peru	-	7233 (7233)	13034 (13034)	5581 (5581)	1884 (1884)	38 (20)	2 (2)	9 (6)	-	-
Suriname	2742 + 10 bags (2742	5871 (2912)	191 (0)	-	-	-	-	-	-	-
Uruguay	-	-	680 (0)	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	9 (9)
South America	3039 (0)	1504 (0)	9125 (0)	-	299 (0)	103	-	-	196 (0)	112 (0)
<u>Countries without wild populations of <u>Felis pardalis</u></u>										
Austria	-	-	-	-	152	-	-	-	-	-
Belgium	-	-	600	1729	-	450	35	69	-	-
Canada	-	544	543	1	99	14	-	-	79	-
Denmark	-	-	-	341	-	-	-	-	-	-
France	-	-	-	-	1250	-	-	-	-	-
F.R. Germany	82	6	243	53	-	12	-	40	-	-
Italy	-	-	2	49	158	-	-	-	-	-
Nigeria	-	-	-	200	-	-	-	-	-	-
Pakistan	-	-	-	-	-	-	-	-	-	-
South Africa	-	-	1010	-	-	-	-	-	-	-
Switzerland	-	234	-	-	-	1	-	16	-	120
UK	-	5205	391	216	191	-	-	-	-	-
Unknown	3766	2552	10892	994	494	740	1518	398	208	-

Felis tigrina

Table 1 Net imports

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Austria	-	1004	541	254	80	1998	288	1423	269	417
Belgium	4121	-	750	6615	22624	242	1050	-	-	-
Canada	4670	2522	-	-	-	-	-	-	-	-
F.R. Germany	-	-	46423	718	811	31128	65645	80068	11274	-
France	-	-	-	-	-	-	-	-	22647	1635
Greece	-	4045	-	12142	9588	-	-	-	-	-
Italy	-	-	-	-	376	58	1000	2850	-	-
Japan	-	-	-	-	-	-	-	-	606 kg	-
Luxembourg	-	-	-	-	7	10	-	13	-	-
Mexico	-	-	-	-	-	92	-	-	-	-
Netherlands	-	-	99	-	-	-	-	36	-	-
Spain	200	2166	-	831	-	186	180	-	815	-
Sweden	-	-	-	-	3	-	-	-	2	-
Switzerland	-	37	476	2985	-	1295	-	102	-	1
UK	-	3646	-	-	-	-	-	1	-	-
USA	-	-	-	-	-	49	-	-	-	-
Total	8991	13420	48289	23545	33489	35058	68163	84493	35007 + 606 kg	2053

Felis tigrina (continued)

Table 2 Original source

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Countries with wild populations of Felis tigrina</u>										
Argentina	-	4045 (0)	-	-	1450 (1450)	1377 (0)	-	-	-	-
Bolivia	-	-	-	-	-	-	-	-	15482 (15482)	2039 (1635)
Brazil	4000 (4000)	2146 (1746)	-	-	-	1 live (1)	-	-	-	-
Panama	-	-	-	399 (399)	145 (145)	-	-	-	-	-
Paraguay	4670	7229	20000	23146	32675	35068	68163	84492	19167 + 606 kg (606 kg)	7 (0)
Venezuela	(0)	(0)	(20000)	(23146)	(31894)	(34986)	(51560)	(28375)	-	(0)
	-	-	-	-	-	1 (1)	-	-	-	-
South America	4606 (0)	-	750 (0)	-	-	-	-	-	-	-
<u>Countries without wild populations of Felis tigrina</u>										
Denmark	-	-	112	-	-	-	-	-	-	-
F.R. Germany	-	-	-	-	-	40	-	1 live	-	-
Honduras	-	-	198	-	-	-	-	-	-	-
India	-	-	10053	-	-	-	-	-	-	-
Italy	-	-	953	-	-	-	-	-	-	-
Jamaica	-	-	214	-	-	-	-	-	-	-
Mongolia	-	-	13	-	-	-	-	-	-	-
UK	-	-	60	-	-	-	-	-	-	-
USA	-	-	5765	-	3	-	-	-	-	-
Uruguay	-	-	10171	-	-	-	-	-	-	-
Unknown	500	-	-	-	1 body	71	1197	2084	358	-

Table 1 Net imports

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Argentina	-	-	-	-	774	-	-	-	-	-
Australia	76	188	100	50	-	-	-	-	-	-
Austria	-	140	2004	-	773	789	110	1399	811	138
Belgium	12	2019	-	228	-	-	102	42	-	-
Canada	169	-	862	-	-	630	500	809	3	-
Denmark	30	512	2247	3204	936	-	-	2377	-	-
F.R. Germany	-	13746	10353	6444	5655	6363	7079	-	-	-
Finland	-	227	-	217	-	-	-	-	3257	-
France	25	-	-	-	286	116	-	-	-	-
Greece	-	-	141	656	1373	-	-	-	-	-
Hong Kong	150	2741	569	487	435	46	-	-	70	-
Israel	-	143	-	-	24	44	-	-	-	-
Italy	1634	264	60	294	8496	8375	5379	3062	-	-
Japan	-	144	226	-	68	128	-	-	-	-
Luxembourg	-	60	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	111	-	-	-	-	-
Morocco	22	-	-	-	-	-	-	-	-	-
Netherlands	20	-	-	-	24	-	-	-	-	-
Norway	178	-	-	-	24	-	-	-	2	-
St Lucia	-	-	-	-	-	-	12	838	-	-
Spain	1592	2169	2384	143	990	1016	-	-	-	-
South Africa	-	16	-	-	-	-	-	-	-	-
Switzerland	76	-	1102	690	-	-	-	40	-	-
Turkey	-	-	-	-	-	-	-	-	-	-
UK	3143	-	-	-	-	-	-	-	-	-
USA	-	-	-	-	12	19	18	23	12	-
Total	7127	22369	20048	12413	19981	17526	13200	8590	4155	138

Felis wiedii (continued)

Table 2 Original source

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Countries with wild populations of <i>Felis wiedii</i></u>										
Argentina	-	274 (0)	-	380 (0)	-	-	-	-	-	-
Belize	-	90 (90)	185 (185)	157 (157)	160 (160)	2 (2)	-	-	-	-
Bolivia	-	-	1691 (300)	-	-	-	-	-	-	-
Brazil	1565 (1565)	1324 (750)	26 (0)	358 (0)	1 (1)	-	-	1 (1)	-	-
Colombia	2596 (0)	101 (101)	-	-	286 (0)	116 (0)	5 (5)	2 (2)	-	-
Costa Rica	-	-	-	-	-	-	-	1 (1)	1 (1)	-
Ecuador	-	-	221 (221)	-	-	1 (1)	3 (3)	-	-	-
Honduras	38 (38)	17 (17)	2636 (0)	-	1566 (0)	7 (7)	-	-	-	-
Mexico	1384 (0)	-	261 (261)	-	3 (3)	2 (2)	2 (2)	6 (4)	9 (9)	-
Nicaragua	-	-	-	-	-	1 (1)	-	-	-	-
Panama	-	131 (131)	93 (93)	120 (120)	1171 (1171)	20 (20)	-	-	-	-
Paraguay	1168 (0)	4873 (4873)	9927 (9927)	7560 (7527)	16693 (14902)	17488 (8534)	13071 (7200)	8558 (500)	4068 (0)	138 (0)
Peru	22 (0)	7279 (7279)	6345 (6345)	2251 (2251)	1638 (625)	-	1 (1)	-	-	-
Suriname	1595 (1595)	2847 (2107)	228 (0)	-	-	-	-	-	-	-
South America	1936 (0)	4768 (0)	6203 (0)	415 (0)	-	-	-	-	72 (0)	-

Felis wiedii (continued)

Table 2 (continued)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Countries without wild populations of <u>Felis wiedii</u></u>										
Austria	-	-	803	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	8	-	-
Canada	-	-	803	530	910	-	-	-	-	-
Denmark	-	-	-	747	-	-	-	-	-	-
F.R. Germany	-	-	2136	-	-	-	-	-	-	-
Italy	-	-	803	-	-	-	-	-	-	-
Namibia	-	-	-	12	-	-	-	-	-	-
Sudan	-	-	42	-	-	-	-	-	-	-
UK	-	3442	374	50	916	-	-	-	-	-
Unknown	1733	2603	2790	1190	303	5	156	15	507	-

Table 1 Net imports

Panthera onca

All reported commodities were included in this tabulation.

KEY: s = skin, l = live, t = trophy, tee = teeth, b = body, f = feet, c = claw, spe = specimen
skp = skin piece, sku = skull.

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Argentina	-	-	16s	-	-	-	-	-	-	-
	-	-	-	2l	-	-	-	-	-	-
Australia	-	2l	1l	-	-	-	-	-	-	-
	-	-	-	-	-	1spe	-	-	-	-
Austria	110s	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	1l	-	-
Belgium	93s	18s	-	-	-	1s	-	-	-	-
Brazil	-	-	-	-	-	1s	-	-	-	-
Burma	-	-	-	-	1l	-	-	-	-	-
Canada	-	1s	2s	1s	2s	2s	3s	9s	4s	-
	-	-	-	-	2l	3l	15l	5l	-	-
	-	-	1t	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	1skp	-
Chile	-	-	-	2l	-	-	-	-	-	-
China	-	-	-	-	1l	2l	2l	4l	4l	-
Costa Rica	-	-	-	-	-	-	-	1l	-	-
Czechoslovakia	-	-	-	2l	-	-	-	-	-	-
Denmark	-	-	1s	-	-	-	-	-	-	-

Panthera onca (continued)

Table 1 (continued)										
	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
F.R. Germany	42s 21 8t	1s 81 2t	- - -	- 31 1t	- 21 -	- 13s -	- 51 -	- -	- -	- -
German, D.R.	- -	- 21	- -	- -	- -	- -	- -	- -	- -	- -
Greece	-	-	-	-	-	-	1b	-	-	-
Guatemala	-	-	-	-	21	-	-	-	-	-
Hong Kong	-	-	-	11	-	-	21	-	-	-
India	-	-	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	21	-	21	-	-
Ireland	-	-	-	11	-	-	-	-	-	-
Israel	56s	-	-	-	-	-	-	-	-	-
Italy	333s -	- 21	- -	- -	572s 51	- 41	- 71	- 21	- 21	- -
Japan	32s - -	- - -	- - -	- - -	- - 1t	- 11 -	- 21 -	- 51 -	- 21 -	- -
Korea, Rep.	-	-	-	-	-	-	-	41	-	-
Lebanon	-	-	-	-	11t	-	-	-	-	-
Mexico	-	-	-	-	13s 41	8s -	- -	- 21	- -	- -

Panthera onca (continued)

Table 1 (continued)	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Netherlands	-	-	-	-	1t	-	-	-	-	-
Norway	-	-	-	-	-	-	7s	-	-	-
Pakistan	-	-	-	-	-	-	-	-	2l	-
Romania	-	2l	-	-	-	-	-	1l	3l	-
St Lucia	-	-	-	-	-	-	-	1s	-	-
Singapore	-	-	-	-	-	-	-	4l	-	-
South Africa	-	2s	-	-	-	-	1s	-	-	-
	-	-	-	-	-	-	1l	-	-	-
	-	-	-	-	-	-	1skp	-	-	-
Spain	46s	20s	-	-	-	-	-	-	-	-
	-	-	-	-	-	1l	-	2l	2l	-
	-	-	1t	-	-	-	-	-	-	-
Sri Lanka	-	-	-	-	-	-	2l	-	-	-
Switzerland	78s	5s	-	47s	-	-	-	-	-	1s
	-	-	3l	-	-	-	-	-	3l	-
Taiwan	-	-	1l	4l	1l	-	-	-	-	-
Turkey	-	-	-	-	-	-	1l	-	-	-
UK	-	-	-	-	-	-	-	1l	-	-

Panthera onca (continued)

Table 1 (continued)	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
USA	-	-	-	-	-	-	-	-	-	-
	21	-	21	-	30s	21s	12s	14s	18s	-
	-	-	-	-	-	-	-	-	41	-
	-	-	-	-	1t	1t	-	1t	-	-
	-	-	-	-	12tee	-	-	-	-	-
	-	-	-	-	-	1b	-	-	-	-
	-	-	-	-	-	1f	-	1f	-	-
	-	-	-	-	-	4c	-	49c	-	-
	-	-	-	-	-	-	-	1skp	-	-
	-	-	-	-	-	-	-	1sku	-	-
USSR	-	-	-	-	11	-	21	-	-	-
Yugoslavia	-	-	11	-	-	-	-	-	-	-
Unknown	-	-	11	-	-	-	-	11	-	-
Total:	790s	47s	19s	48s	617s	46s	23s	24s	22s	1s
	41	161	91	151	191	131	391	351	241	-
	8t	2t	1t	2t	14t	1t	-	1t	-	-
	-	-	-	-	12tee	-	-	-	-	-
	-	-	-	-	-	1b	1b	-	-	-
	-	-	-	-	-	1f	-	1f	-	-
	-	-	-	-	-	4c	-	49c	-	-
	-	-	-	-	-	1spe	-	-	-	-
	-	-	-	-	-	-	1skp	1skp	1skp	-
	-	-	-	-	-	-	-	1sku	-	-

Panthera onca (continued)

Table 2 Original source

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Countries having or possibly having wild populations of <u>P. onca</u>										
Belize			-	-	-	1s	-	-	-	-
Bolivia			-	-	5s	5s	2s	1s	-	-
	-	-	-	-	-	1t	-	-	-	-
	-	-	-	-	-	-	-	1f	-	-
	-	-	-	-	-	-	-	1skp	-	-
Brazil	470s	20s	-	-	-	-	-	-	-	-
	-	6l	-	-	3l	2l	-	-	-	-
	-	-	1t	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	49c	-	-
Colombia	-	-	1s	-	2s	1s	1s	1s	-	-
Costa Rica	-	-	-	-	-	-	-	1s	-	-
Ecuador	-	-	-	-	1s	-	-	-	-	-
El Salvador	-	-	1s	-	-	-	-	-	-	-
Guatemala	-	-	-	-	-	-	1s	-	1s	-
Guyana	-	1s	-	-	1s	-	-	1s	1s	-
Honduras	-	-	-	-	-	1s	-	-	1s	-
Mexico	-	-	-	-	2s	2s	-	3s	9s	-
	-	-	-	1t	-	-	-	1t	-	-
	-	-	-	-	-	-	-	1sku	-	-

Panthera onca (continued)

Table 2 (continued)	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Nicaragua	-	-	-	-	-	1s	-	-	-	-
Panama	-	-	-	2l	2s	-	-	-	-	-
Paraguay	5s	-	-	-	587s	10s	-	-	-	-
Peru	-	-	-	-	2s	-	-	-	-	-
	-	-	-	-	6tee	-	-	-	-	-
	-	-	-	-	-	1f	-	-	-	-
USA	-	-	-	-	-	-	-	1s	-	-
	-	-	4l	5l	7l	4l	16l	14l	4l	-
Venezuela	-	-	-	-	-	-	-	-	-	1s
	-	-	-	-	-	4c	-	-	-	-
South America	120s	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	1l	-	-	-	-
	8t	-	-	-	-	-	-	-	-	-
Countries without wild populations of <u>P. onca</u>										
Austria	-	-	-	-	-	-	1s	-	-	-
	-	3l	-	-	-	-	-	2l	3l	-
	-	-	-	-	-	-	1skp	-	-	-
Belgium	-	-	-	-	-	-	-	-	2l	-
Canada	2l	-	5l	1l	-	-	-	-	-	-
China	-	-	-	-	-	-	-	1l	-	-
Czechoslovakia	-	-	-	1l	-	-	2l	1l	-	-

Panthera onca (continued)

Table 2 (continued)	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Denmark	-	-	-	3l	4l	-	-	-	-	-
F.R. Germany	2l	1s 3l	- 4l	- 1l	-	- 3l	- 3l	- 9l	- 4l	-
German, D.R.	-	1l	1l	3l	-	-	2l	2l	2l	-
Hong Kong	-	-	-	-	1l	-	2l	1l	3l	-
India	-	-	2l	-	-	-	-	1l	-	-
Ireland	-	-	-	-	1l	-	-	2l	-	-
Kenya	1s	-	-	-	-	-	-	-	-	-
Netherlands	-	-	2l	-	4l	3l	3l	1l	3l	-
New Zealand	-	2l	-	-	-	1spe	-	3l	1l	-
Poland	-	-	-	-	-	-	1l	-	-	-
Singapore	-	-	-	-	2s	-	-	-	-	-
South Africa	-	-	-	1t	-	-	-	-	-	-
Spain	-	1t	-	-	-	-	-	-	-	-
Sri Lanka	-	-	-	-	-	-	-	2l	-	-
Switzerland	4s 2l	- 7l	- 1l	- 3l	- 1l	1s -	- -	- -	- -	- -

Panthera onca (continued)

Table 2 (continued)
1976

	1977	1978	1979	1980	1981	1982	1983	1984	1985
Thailand	-	1t	-	-	-	-	-	-	-
UK	-	-	1l	-	3l	2l	8l	2l	-
Unknown	196s	25s	17s	48s	30s	28s	18s	10s	-
	-	1l	1l	-	2l	-	8l	4l	-
	-	-	-	-	14t	-	-	-	-
	-	-	-	-	6tee	-	-	-	-
	-	-	-	-	1b	1b	-	-	-
	-	-	-	-	-	-	-	1skp	-

APPENDIX B

Published overseas trade statistics

Many countries publish overseas trade statistics in the form of Customs reports or other similar publications. Such reports most frequently use general commodity headings of little use for analysing wildlife trade at specific or even generic level. Nevertheless a selection of such reports was analysed at the UK Department of Trade and Industry, Statistics and Market Intelligence Library (SMIL), London. The reports examined were those of all Latin American countries and all countries which were likely to have imported large quantities of cat or otter skins. Reports covering the past ten years are usually available at SMIL, therefore in most cases reports from 1976 to 1985 were studied. A further attempt to obtain such statistics was made through a direct approach to all of the Latin American CITES Management Authorities by correspondence. These letters were sent in Spanish and mailed from the CITES Secretariat in Switzerland in an attempt to maximise the response.

Latin American countries

An attempt was made to extract information from the overseas trade reports of all Latin American countries. SMIL held potentially useful trade information for fourteen of the twenty-one countries for which information was sought. Of these fourteen, only two reports included useful categories and neither of these contained any trade records. Therefore, in the reports checked, all trade in cat and otter skins was assumed to have been included under more general categories, such as 'raw fur skins'. Furthermore, none of the CITES Management Authorities which were contacted, forwarded any overseas trade statistics.

Importing countries

External trade information was sought for the following countries: Austria; Belgium/Luxembourg; Federal Republic of Germany; France; Greece; Italy; Japan; Netherlands; Spain; Switzerland; United Kingdom; United States of America. Categories detailing trade in Felidae were found in a number of the reports from these countries, however none of the reports contained any useful information on trade in Lutrinae. The following summarises the findings.

Austria	- no useful category
Belgium	- see Table (1976-1984)
F.R. Germany	- see Table (1976-1985)
France	- see Table (1976-1985)
Greece	- no imports of wild cat skins from Latin America
Italy	- see Table (1976-1985)
Japan	- no useful category
Netherlands	- no relevant data
Spain	- see Table (1980-1984)
Switzerland	- no relevant data
UK	- see Table (1976-1984)
USA	- see Table (1976-1981)

The following tables detail the reports of Felid skins in trade.

Imports of cat skins into the Federal Republic of Germany
from Latin American countries

SOURCE: Aussehenhandel nach Waren und Ländern (Spezialhandel). Reihe 2 Herausgeber: Statistisches Bundesamt Wiesbaden. Includes raw and tanned whole skins.

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	TOTAL
Argentina	74572	68118	47715	17343	4190	6225	-	10439	4503	-	233105
Belize	504	642	739	-	-	-	-	-	-	-	1885
Bolivia	-	7580	10956	-	-	-	-	6166	10312	28957	63971
Brazil	95411	75262	65053	61400	34108	-	-	-	-	-	331234
Colombia	15248	4456	2253	1483	3004	-	-	-	-	-	26444
Ecuador	2096	-	482	-	-	-	-	-	-	-	2578
El Salvador	809	-	-	-	-	-	-	-	-	-	809
Honduras	2222	899	654	-	-	-	-	-	-	-	3775
Mexico	9017	12125	5819	698	1204	-	-	-	-	-	28863
Nicaragua	5579	687	-	889	-	-	-	-	-	-	7155
Panama	718	1349	1379	-	1456	-	-	-	-	-	4902
Paraguay	28839	103693	180677	230105	175012	127098	95402	161150	52749	-	1,154725
Peru	1275	13624	14775	6732	3867	-	-	-	-	-	40273
Suriname	2461	6358	-	-	-	-	-	-	-	-	8819
Uruguay	-	-	-	2677	-	-	-	7000	-	-	2677
Venezuela	-	515	4833	7438	-	-	-	-	-	-	12786
TOTAL	238751	295308	335335	328765	222841	133323	95402	184755	67564	28957	1,931,001

Imports of cat skins into France
from Latin American countries

SOURCE: Statistiques du Commerce Extérieur de la France. Importations/Exportations Ministère du Budget, Direction Générale des Douanes et Droits Indirects. Includes raw and tanned whole skins.

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Argentina	3738	-	-	2597	-	-	-	3152	-	-
Bolivia	-	-	-	-	-	-	-	-	9139	8195
Brazil	-	-	-	22082	10438	-	-	1499	-	-
Paraguay	-	-	-	-	-	-	48881	123951	18426	-
<u>TOTAL</u>	<u>3738</u>	<u>0</u>	<u>0</u>	<u>24679</u>	<u>10438</u>	<u>0</u>	<u>48881</u>	<u>128602</u>	<u>27565</u>	<u>8195</u>

Imports of cat skins into Italy
from Latin American countries

SOURCE: Statistica Mensile del Commercio con l'Estero Istituto Centrale di Statistica, Roma.
Includes raw and tanned whole skins.

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Argentina	1300 kg	-	-	-	-	-	-	-	100 kg	-
Brazil	1600 kg	3300 kg	-	-	-	-	-	-	-	-
Paraguay	-	-	-	6400 kg	3000 kg	8500 kg	11900 kg	400 kg	-	100 kg
<u>TOTAL</u>	<u>2900 kg</u>	<u>3300 kg</u>	<u>0</u>	<u>6400 kg</u>	<u>3000 kg</u>	<u>8500 kg</u>	<u>11900 kg</u>	<u>400 kg</u>	<u>100 kg</u>	<u>100 kg</u>

Imports of whole raw and tanned cat skins into Belgium
from Latin American countries

SOURCE: Bulletin Mensuel du Commerce Extérieur de l'Union Economique Belgo-Luxembourgeoise. Ministère des Affaires Economiques, Institut National de Statistique.

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Brazil	-	-	-	-	4022	-	-	-	-	?
Paraguay	-	-	-	-	-	-	-	6616	-	?
Suriname	-	-	13502	9431	-	-	-	-	-	?

Imports of raw, tanned and prepared wild cat skins into Spain
from Latin American countries

SOURCE: Estadística del Comercio Exterior de Espana. Ministerio de Hacienda, Direccion General de Aduanas.

	1980		1981		1982		1983		1984	
	No.	kg	No.	kg	No.	kg	No.	kg	no.	kg
Argentina	?	38	-	-	3446	535	?	8	460	53
Paraguay	?	323	4675	1046	7471	934	800	131	2212	406
					?	2000	?	61		

Imports of wild cat skins from Latin American countries
into the United Kingdom

SOURCE: Overseas Trade Statistics of the UK, Department of Trade and Industry.
Direct imports from Latin American countries.
Including raw and tanned or dressed skins.

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
<u>Felis pardalis</u>										
Bolivia	-	3501	-	-	-	-	-	-	-	?
Brazil	5435	1995	226	-	-	-	-	-	-	?
Suriname	2742	2083	-	-	-	-	-	-	-	?
<u>Panthera onca</u>										
Brazil	100	-	-	-	-	-	-	-	-	?
Wild felines not elsewhere specified										
Argentina	6903	2931	153	1	2079	-	-	-	-	?
Bolivia	-	1309	-	-	-	-	-	-	-	?
Brazil	6973	2000	1691	-	-	-	-	-	-	?
Mexico	-	-	166	-	-	-	-	-	-	?
Paraguay	-	1836	-	1450	-	-	-	-	-	?
Suriname	1378	2103	-	-	-	-	-	-	-	?
TOTAL	23531	17758	2236	1451	2079	0	0	0	0	?

Imports of Latin American cat skins into the United States of America

SOURCE: U.S. Imports for consumption, IM 146 (Customs value), U.S. Department of Commerce.

The only useful categories in the Customs reports for 1976 to 1981 were 'Furskins, jaguar' (under which no trade was reported during this period) and 'Furskins, ocelot'. Other species were included in a general furskins category. McMahan (in press) reported that after 1981 the U.S. Customs Service only collected specific data for lynx, all of the Latin American cats having been grouped in the general furskins category.

Exporter	1976	1977	1978	1979	1980	1981
ocelot skins imported						
Canada	3876	-	-	-	-	-
France	-	-	-	-	-	1601

Amount of wild cat skins from Little American reservation
 1890-1900

Specs. Bureau Trade Statistics of the U.S. Department of Trade and Commerce.
 Special Agents from Little American reservation.
 Including fur and bones of domestic animals.

Year	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	2101	2102	2103	2104	2105	2106	2107	2108	2109	2110	2111	2112	2113	2114	2115	2116	2117	2118	2119	2120	2121	2122	2123	2124	2125	2126	2127	2128	2129	2130	2131	2132	2133	2134	2135	2136	2137	2138	2139	2140	2141	2142	2143	2144	2145	2146	2147	2148	2149	2150	2151	2152	2153	2154	2155	2156	2157	2158	2159	2160	2161	2162	2163	2164	2165	2166	2167	2168	2169	2170	2171	2172	2173	2174	2175	2176	2177	2178	2179	2180	2181	2182	2183	2184	2185	2186	2187	2188	2189	2190	2191	2192	2193	2194	2195	2196	2197	2198	2199	2200	2201	2202	2203	2204	2205	2206	2207	2208	2209	2210	2211	2212	2213	2214	2215	2216	2217	2218	2219	2220	2221	2222	2223	2224	2225	2226	2227	2228	2229	2230	2231	2232	2233	2234	2235	2236	2237	2238	2239	2240	2241	2242	2243	2244	2245	2246	2247	2248	2249	2250	2251	2252	2253	2254	2255	2256	2257	2258	2259	2260	2261	2262	2263	2264	2265	2266	2267	2268	2269	2270	2271	2272	2273	2274	2275	2276	2277	2278	2279	2280	2281	2282	2283	2284	2285	2286	2287	2288	2289	2290	2291	2292	2293	2294	2295	2296	2297	2298	2299	2300	2301	2302	2303	2304	2305	2306	2307	2308	2309	2310	2311	2312	2313	2314	2315	2316	2317	2318	2319	2320	2321	2322	2323	2324	2325	2326	2327	2328	2329	2330	2331	2332	2333	2334	2335	2336	2337	2338	2339	2340	2341	2342	2343	2344	2345	2346	2347	2348	2349	2350	2351	2352	2353	2354	2355	2356	2357	2358	2359	2360	2361	2362	2363	2364	2365	2366	2367	2368	2369	2370	2371	2372	2373	2374	2375	2376	2377	2378	2379	2380	2381	2382	2383	2384	2385	2386	2387	2388	2389	2390	2391	2392	2393	2394	2395	2396	2397	2398	2399	2400	2401	2402	2403	2404	2405	2406	2407	2408	2409	2410	2411	2412	2413	2414	2415	2416	2417	2418	2419	2420	2421	2422	2423	2424	2425	2426	2427	2428	2429	2430	2431	2432	2433	2434	2435	2436	2437	2438	2439	2440	2441	2442	2443	2444	2445	2446	2447	2448	2449	2450	2451	2452	2453	2454	2455	2456	2457	2458	2459	2460	2461	2462	2463	2464	2465	2466	2467	2468	2469	2470	2471	2472	2473	2474	2475	2476	2477	2478	2479	2480	2481	2482	2483	2484	2485	2486	2487	2488	2489	2490	2491	2492	2493	2494	2495	2496	2497	2498	2499	2500	2501	2502	2503	2504	2505	2506	2507	2508	2509	2510	2511	2512	2513	2514	2515	2516	2517	2518	2519	2520	2521	2522	2523	2524	2525	2526	2527	2528	2529	2530	2531	2532	2533	2534	2535	2536	2537	2538	2539	2540	2541	2542	2543	2544	2545	2546	2547	2548	2549	2550	2551	2552	2553	2554	2555	2556	2557	2558	2559	2560	2561	2562	2563	2564	2565	2566	2567	2568	2569	2570	2571	2572	2573	2574	2575	2576	2577	2578	2579	2580	2581	2582	2583	2584	2585	2586	2587	2588	2589	2590	2591	2592	2593	2594	2595	2596	2597	2598	2599	2600	2601	2602	2603	2604	2605	2606	2607	2608	2609	2610	2611	2612	2613	2614	2615	2616	2617	2618	2619	2620	2621	2622	2623	2624	2625	2626	2627	2628	2629	2630	2631	2632	2633	2634	2635	2636	2637	2638	2639	2640	2641	2642	2643	2644	2645	2646	2647	2648	2649	2650	2651	2652	2653	2654	2655	2656	2657	2658	2659	2660	2661	2662	2663	2664	2665	2666	2667	2668	2669	2670	2671	2672	2673	2674	2675	2676	2677	2678	2679	2680	2681	2682	2683	2684	2685	2686	2687	2688	2689	2690	2691	2692	2693	2694	2695	2696	2697	2698	2699	2700	2701	2702	2703	2704	2705	2706	2707	2708	2709	2710	2711	2712	2713	2714	2715	2716	2717	2718	2719	2720	2721	2722	2723	2724	2725	2726	2727	2728	2729	2730	2731	2732	2733	2734	2735	2736	2737	2738	2739	2740	2741	2742	2743	2744	2745	2746	2747	2748	2749	2750	2751	2752	2753	2754	2755	2756	2757	2758	2759	2760	2761	2762	2763	2764	2765	2766	2767	2768	2769	2770	2771	2772	2773	2774	2775	2776	2777	2778	2779	2780	2781	2782	2783	2784	2785	2786	2787	2788	2789	2790	2791	2792	2793	2794	2795	2796	2797	2798	2799	2800	2801	2802	2803	2804	2805	2806	2807	2808	2809	2810	2811	2812	2813	2814	2815	2816	2817	2818	2819	2820	2821	2822	2823	2824	2825	2826	2827	2828	2829	2830	2831	2832	2833	2834	2835	2836	2837	2838	2839	2840	2841	2842	2843	2844	2845	2846	2847	2848	2849	2850	2851	2852	2853	2854	2855	2856	2857	2858	2859	2860	2861	2862	2863	2864	2865	2866	2867	2868	2869	2870	2871	2872	2873	2874	2875	2876	2877	2878	2879	2880	2881	2882	2883	2884	2885	2886	2887	2888	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